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RESULTS OF AN EXPERIMENTAL INVESTIGATION TO DETERMINE SEPARATION CHARACTERISTICS FOR THE ORBITER/747 USING A 0.0125-SCALE MODEL (48-0 AX1318I-1 747) IN THE AMES RESEARCH CENTER 14-FOOT WIND TUNNEL (CA23B)

CHRYSLER CORP., NEW ORLEANS, LA. SPACE DIV

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14-FOOT WIND TUNNEL (CA23B)

bу

V. Esparza Rockwell International Space Division

Prepared under NASA Contract Number NAS9-13247

Ъу

Data Management Services Chrysler Corporation Space Division New Orleans, La. 70189

for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number:

ARC 14-120

NASA Series Number:

CA23B

Model Number:

48-0 Orbiter/AX1318I-1 747

Test Dates:

June 23 through July 22, 1975

Occupancy Hours:

180

FACILITY COORDINATOR:

William Davis

Ames Research Center

Mail Stop 227-5

Moffett Field, Calif.

Phone: (415) 965-5850

PROJECT ENGINEERS:

V. Esparza

Rockwell International

Space Division

12214 Lakewood Blvd.

Mail Code ACO7

Downey, Calif. 90241

Phone: (213) 922-4994

J. Brownson

Ames Research Center

Mail Stop 227-5

Moffett Field, Calif.

94035

D. Pena

ARO, Inc.

Ames Research Center Mail Stop 226-3

Moffett Field, Calif.

94035

Phone: (415) 965-6262 Phone: (415) 965-5152 AERODYNAMICS ANALYSIS ENGINEERS:

W. L. Osborn

Rockwell International

Space Division

12214 Lakewood Blvd.

Mail Code ACO7

Downey, Calif. 90241

C. R. Mullen

The Boeing Company Orgn. B-8241 OL-21

Seattle, Washington

98007

L. Perez

D. Homan NASA/JSC

Bldg. 45, EX33

Houston, Texas 77058

Phone: (213) 922-5049

Phone: (206) 342-1112

Phone: (713) 483-4701

DATA MANAGEMENT SERVICES:

Prepared by:

Liaison--D. W. Hersey

Operations -- R. H. Lindahl

Reviewed by:

D. E. Poucher

Approved: J. J. Clynn, Manager

Concurrence:

N. D. Kemp, Manager

Data Management Services

Chrysler Corporation Space Division assumes no responsibility for the data presented other than display characteristics.

RESULTS OF AN EXPERIMENTAL INVESTIGATION TO DETERMINE SEPARATION CHARACTERISTICS FOR THE ORBITER/747 USING A 0.0125-SCALE MODEL (48-0 AX13181-1 747) IN THE AMES RESEARCH CENTER 14-FOOT WIND TUNNEL (CA23B)

by

V. Esparza Rockwell International Space Division

ABGTRACT

This report documents aerodynamic separation data obtained from a wind tunnel test of an 0.0125-scale SSV Orbiter model of a VC70-000002 Configuration and a 0.0125-scale 747 model built by The Boeing Company.

Separation data were obtained at a Mach number of 0.6 and three incidence angles (i_0) of 4° , 6° , and 8° . The orbiter angle of attack was varied from 0 to 14 degrees.

Longitudinal, lateral and normal separation increments were obtained for fixed 747 angles of attack of 0° , 2° , and h° while varying orbiter angle of attack. Control surface settings on the 747 carrier included rudder deflections of 0° and 10° and horizontal stabilizer deflections of -1° and $+5^{\circ}$.

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NOMENCLATURE General

SYMBOL	PLOT SYMBOL	DEFINITION
a		speed of sound; m/sec, ft/sec
$C_{\mathbf{p}}$	CP	pressure coefficient; $(P_i - P_{\infty})/q$
М	MACH	Mach number; V/a
Р		pressure; N/m , psf
q	Q(NSM) Q(PSF)	dynamic pressure; $1/2 \text{ pV}^2$, N/m^2 , pst
RN/L	RN/L	unit Reynolds number; per m, per ft
V		velocity; m/sec, ft/sec
α	ALPHAC	747 angle of attack, degrees
α_{O}	ALPHAO	Orbiter angle of attack, degrees
β	BETA BETAC	747 angle of sideslip, degrees
β _O	BETAO	Orbiter angle of sideslip, degrees
Ψ	PSI	angle of yaw, degrees
ф	PHIC	Orbiter angle of roll, degrees 747 angle of roll, degrees
io	IORB	Orbiter incidence relative to 747 FRL, degrees
ρ		mass density; kg/m ³ , slugs/ft ³
	Ref	erence & C.G. Definitions
A_b		base area; m ² , ft ²
Ъ	BREF	wing span or reference span; m, ft
c.g.		center of gravity
L _{REF}	LREF	reference length or wing mean aerodynamic chord; m, ft

NOMENCLATURE (Continued)

SYMBOL	PLOT SYMBOL	DEFINITION
S	SREF	wing area or reference area; m ² , ft ²
MRC	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis

SUBSCRIPTS

b	base
1	local
s	static conditions
t	total conditions
t ∞	total conditions free stream

Body-Axis System

SYMBOL	PLOT SYMBOL	DEFINITION
$C_{ m N}$	CN	normal-force coefficient; normal force
$^{\mathrm{C}}\!\mathrm{A}$	CA	axial-force coefficient; axial force
$C\mathbf{Y}$	CY	side-force coefficient; side force
$^{\mathrm{C}}\mathtt{A}_{\mathrm{b}}$	CAB	base-force coefficient; base force
		$-A_{\mathbf{b}}(\mathbf{p}_{\mathbf{b}} - \mathbf{p}_{\mathbf{w}})/\mathbf{q}\mathbf{S}$
$^{\mathrm{C}}A_{\mathbf{f}}$	CAF	forebody axial force coefficient; $^{\text{C}}_{\text{A}}$ - $^{\text{C}}_{\text{A}}_{\text{b}}$
C m	CLM	pitching-moment coefficient; pitching moment
		1411

NOMENCLATURE (Continued)

Body-Axis System

SYMBOL	PLOT SYMBOL	DEFINITION
C _n	CLN	yawing-moment coefficient; yawing moment qSb
C ₂	CBL	rolling-moment coefficient; rolling moment qSb
	_	
	<u> </u>	tability-Axis System
CL	CL	lift coefficient; $\frac{\text{lift}}{\text{qS}}$
C D	CD	drag coefficient; drag qS
$C_{\mathbf{Y}}$	CY	side-force coefficient; side force qS
$^{\text{C}}_{\text{D}_{\text{b}}}$	CDB	base-drag coefficient; $\frac{\text{base drag}}{\text{qS}}$
$\mathtt{c}_{\mathtt{D}_{\mathbf{f}}}$	CDF	forebody drag coefficient; $C_D - C_{D_b}$
C _m	CLM	pitching-moment coefficient; pitching moment qsl _{REF}
C _n	CLN	yawing-moment coefficient; yawing moment qSb
C &	CSL	rolling-moment coefficient; rolling moment qSb
L/D	L/D	lift-to-drag ratio; $C_{\rm L}/C_{\rm D}$
$\texttt{L/D}_{\mathbf{f}}$	L/DF	lift to forebody drag ratio; ${^{\text{C}}_{\text{L}}}/{^{\text{C}}_{\text{D}}}_{\text{f}}$

NOMENCLATURE (Continued)

SYMBOL	PLOT SYMBOL	DEFINITION
$\Delta c_{ m L}$	DCL	incremental lift coefficient
ΔC_{D}	DCD	incremental drag coefficient
ΔC_{m}	DCLM	incremental pitching-moment coefficient
$\Delta C_{\mathbf{Y}}$	DCY	incremental side-force coefficient
ΔC_n	DCYN	incremental yawing-moment coefficient
∆C _ℓ	DCBL	incremental rolling-moment coefficient
	XZCP	longitudinal center of pressure in normal force plane
	XYCP	lateral center of pressure in side force plane
$\delta_{f r}$	RUDDER	747 rudder surface deflection angle, positive deflection trailing edge to the left, degrees
δ _e	ELEVON	Orbiter elevon surface deflection angle, positive deflection trailing edge down, degrees
82	STAB	747 stabilizer surface deflection angle, positive deflection trailing edge down, degrees

ORBITER SYMBOL	PLOT SYMBOL	DEFINITION
c _{Pco}	CPC	Orbiter balance cavity pressure coefficient
${^{\mathrm{C}}}_{\mathrm{P}_{\mathrm{Bl}}}$	CPB1	Orbiter tail-cone-off base pressure coefficient
c _{PB2}	CPB2	Orbiter tail-cone-off base pressure coefficient

NOMENCLATURE (Concluded)

ORBITER SYMBOL	PLOT SYMBOL	<u>DEFINITION</u>
$c_{P_{B3}}$	CPB3	Orbiter tail-cone-off pressure coefficient
$\mathtt{c}_{\mathtt{PBE}}$	CPE3	Dummy strut pressure coefficient
$^{\mathtt{C}_{\mathtt{P}_{\mathtt{Sl}}}}$	CPS1	Pressure coefficient on L.H. side of Strut \mathbf{S}_1
$c_{\mathrm{P}_{\mathrm{S2}}}$	CPS2	Pressure coefficient on R.H. wide of Strut \mathbf{S}_1
747 SYMBOL		
$^{\mathrm{C}}\mathrm{P}_{\mathrm{CC}}$	CPCC	747 sting cavity pressure coefficient
$\mathtt{c}_{\mathtt{P}_{\mathtt{SBl}}}$	CPSB1	747 sting base exit pressure coefficient
$c_{\mathrm{P}_{\mathrm{SB2}}}$	CPSB2	747 sting base exit pressure coefficient
SEPARATION PARAMETERS	PLOT SYMBOL	
ΔΧ	DX	Longitudinal displacement, ft.
ΔΥ	DY	Lateral displacement, ft.
ΔΖ	DZ	Vertical displacement, ft.



REMARKS

The nominal orbiter elevon deflections tested were 0° and $+5^{\circ}$. The actual measured elevon deflections were as follows:

NOMINAL		MEAS	URED	
	⁶ e∃	^δ e Left		ght
	Outboard	Inboard	Outboard	Inboard
5°	4°59 '	5°10'	4°55') ₁ °53'

The zero elevon deflection was not measured since it faired into the contour of the VC70-000002 orbiter vehicle lines.

The 747 carrier nominal horizontal stabilizer settings used in the test were $\delta_{\omega} = -1^{\circ}$ and $\delta_{\omega} = 5^{\circ}$. The actual measured deflections were $\delta_{\omega} = -53'$ and $\delta_{\omega} = +4^{\circ}48'$, respectively.

CONFIGURATIONS INVESTIGATED

The Orbiter model was a 0.0125 scale representation of the Rockwell International Space Shuttle Vehicle built to Rockwell lines VC70-000007. The basic orbiter model is of the blended wing-body design utilizing a double delta wing (75°/45°), full span elevons with deflection capability, a centerline vertical tail with rudder deflection capability, a canopy, a body flap and an orbital maneuvering system (OMS) mounted on the aft fuselage sidewalls.

A tail cone fairing used to cover the MPS nozztes and OMS nozzles was tested for a limited number of runs.

The .0125 scale model of the Rockwell International Space Shuttle Vehicle is constructed primarily of 7075-T6 aluminum. The orbiter wing panels are made from 2024-T-851 aluminum while the elevon brackets are made from ARMCO 17-4 PH CRES.

Model Nomenclature

$$o_1 = B_{64} c_{14} F_{14} E_{44} M_{18} N_{94} N_{92} R_{18} V_{23} W_{116}$$

$$O_2 = B_{614} C_{114} F_{114} E_{1144} M_{18} N_{914} N_{92} W_{1116}$$

$$o_3 = B_{64} C_{14} F_{14} E_{44} M_{18}$$
 $R_{18} V_{23} W_{116} TC_{4}$

$$o_4 = B_{64} C_{14} F_{14} E_{44} M_{18} N_{92} R_{18} V_{23} W_{116}$$

Component

Description

B₆₄

Orbiter fuselage per Rockwell lines VC70-000002, Model Drawing SS-A01377

CONFIGURATIONS INVESTIGATED - (Continued)

Component	Description
c_{14}	Orbiter canopy per Rockwell lines VC70-000002, Model Drawing SS-A01377
Ецц	Orbiter full span, unswept hingeline, 6-inch gapped elevons per Rockwell lines VC70-000002, Model Drawing SS-A01377
F_{14}	Orbiter body flap per Rockwell lines VC70-000002, Model Drawing SS-A01377
M ₁₈	Orbiter OMS/RCS pods per Rockwell lines VC70-000002, Model Drawing SS-A01377
N ₉₄	Orbiter main engine nozzles per Rockwell lines VC70-000002, Model Drawing SS-A01377
N ₉₂	Orbiter OMS engine nozzles per Rockwell lines VC70-000002, Model Drawing SS-A01377
R ₁₈	Orbiter rudder per Rockwell lines VC70-000002, Model Drawing SS-A01377
v ₂₃	Orbiter vertical tail per Rockwell lines VC70-000002, Model Drawing SS-A01377
W ₁₁₆	Orbiter double delta wing per Rockwell lines VC70-000002, Model Drawing SS-A01377
TC ₁₄	Orbiter tail cone fairing which covers the MPS nozzles and the OMS nozzles and base.

The attach hardware utilized in conjunction with separation testing consisted of several configurations. The faired aft attach hardware (AT_{99}) was used throughout the duration of the separation test. Incidence angles of 4° , 6° , and 8° were tested utilizing the faired forward attach hardware AT_{96} , AT_{97} , and AT_{98} .

 AT_{97} was used for $i_0 = 6^{\circ}$, and 8° .

CONFIGURATIONS INVESTIGATED - (Continued)

The 0.0125 scale 747 carrier model, fabricated by The Boeing Company, utilized 200 sq. ft. stabilizer tip fins, flaps at 0 degrees and standard in-flight speed brakes extended. The horizontal tail was capable of deflecting +35° to -11° in two degree increments (FRP).

The following nomenclature was used to designate model components for The Boeing Company 0.0125-scale 747 Carrier Model:

Component	Description
B ₂₇ .8	Fuselage
W44.1	Wing
v _{9.1}	Basic Vertical Tail
H ₁₅	Horizontal Tail
H _{15.6}	Horizontal Tail with Vertical Fins
M ₂₅	Inboard Nacelle struts:
^M 26	Outboard Nacelle struts
N ₅₇	Inboard Nacelles
N ₅₈	Outboard Nacelles
S ₁₋₁₂	Spoiler panels
T ₁₄ S ₁	Flap Track Fairing Orbiter support blade strut, upper entry position

The configurations investigated utilizing the components previously described were as follows:

CONFIGURATIONS INVESTIGATED - (Concluded)

Configuration	Orbiter Incidence (i _o)
747/1 AT ₉₆	40
7 ⁴ 7/1 AT ₉₇	6°
747/1 AT ₉₈	8°
747/1 AT ₉₆ O ₂ S ₁	μo
747/1 AT ₉₇ 0 ₂ S ₁	60
747/1 AT ₉₈ 0 ₂ S ₁	80
747/1 AT ₉₆ 0 ₃ S ₁	40
747/1 AT ₉₇ ° ₃ S ₁	6°
747/1 AT ₉₈ o ₃ s ₁	8°
0 ₂ s ₁	
0 ₃ s ₁	

INSTRUMENTATION

The orbiter was mounted on the NASA/Ames 1.0 inch Task MK XIV internal force balance and the 747 Carrier was mounted on the NASA/Ames 1.5 inch MK II Internal Force balance.

Pressure instrumentation in the orbiter consisted of a sting cavity pressure tap (P_{CO}) and a pressure tap (P_{S1}, P_{S2}) on each side of strut S_1 . When the tail cone (TC_4) was removed, three (3) base pressures were measured- P_{B1} , P_{B2} , and P_{B3} . See figures 2g and 2i.

Pressure instrumentation in the 717 carrier consisted of sting cavity pressure tap ($P_{\rm CC}$) and two static pressure taps ($P_{\rm SB1}$, $P_{\rm SB2}$). These tap locations are shown in figure 2i.

TEST FACILITY DESCRIPTION

The Ames 14-Foot Transonic Wind Tunnel was created by extensive modification of the former Ames 16-Foot High Speed Wind Tunnel. It has an adjustable, flexible-wall nozzle and the test section is slotted on all four sides to permit transonic testing. The air circuit is closed except for the air exchanger in a low-speed section of the circuit, which is controlled to maintain the air temperature within suitable limits.

The air is driven by a three-stage, axial-flow compressor powered by three electric motors mounted in tandem outside the wind tunnel. The drive system is rated 110,000 horsepower continuously or 132,000 horsepower for one hour. The speed of the motors is continuously variable over the operating range.

Performance:

Mach number 0.6 to 1.2, continuously variable

Pressure, stagnation, atm 1.0

Reynolds number, per ft 2.8 x 10⁶ to 4.2 x 10⁶

Temperature, stagnation Controllable over limited range by throttling the air exchanger. Generally about 640° R to avoid condensation of moisture

in the test section

In the test section

Dimensions:

Test section height, ft 13.50

Test section width, ft 13.71 at upstream end

13.92 at downstream end

Test section length, ft 33.75

DATA REDUCTION

Model force and moment data were reduced to coefficient form in the body and stability axes systems. Coefficient data were computed separately for each vehicle using its own reference dimensions. Moment data for each vehicle is reduced about its own reference center of gravity.

Relative separation angles and displacements were computed for the orbiter with respect to the 747 carrier. These values are presented in the 747 body axis system and displacement will represent the movement of the orbiter aft attachment point from its base position. The orbiter base position is defined as the orbiter in the mated configuration.

All model positions and attitude data are corrected for support hardware deflections.

Reference Dimensions and Constants

747 Symbol	<u>Definition</u>	Model Scale	Full Scale
S _c	Wing reference area, ft ²	0.859	5 500
ъ _с	Wing span, in.	29.351	2348.04
Ĉ _c	Wing, MAC, in.	4.097	327.78
MRCXc	Moment Ref. Center 747 M.S.	16.749	1339.90
MRCZ _c	Moment Ref. Center 747 W.L.	2.385	190.75
BMCZ _c	Balance Moment Center 747 M.S.	16.608	1328.64
BMCZ _C	Balance Moment Center 747 W.L.	2.896	231.68

DATA REDUCTION (Continued)

Orbiter Symbol	<u>Definition</u>	Model Scale	Full Scale
s _o	Wing reference area, ft ²	0.420	2690
b _o	Wing span, in	11.709	936.68
ਨ₀	Wing MAC, in.	5.935	474.81
MRCX	Moment Ref. Center Orbiter M.S.	13.862	1109
MRCZ	Moment Ref. Center Orbiter W.L.	4.687	375
BMCX	Balance Moment Center Orb. M.S.	13.305	1064
BMCZ	Balance Moment Center Orb. W.L.	5.377	430

Incremental force and moment coefficients were calculated for the orbiter data as follows:

$$\Delta c_{ORB}^{(747)} = c_{ORB}^{(747)} - c_{ORB}^{(ISOL)}$$

where:

 $\Delta C_{ORB}^{(747)}$ = Proximity increment on orbiter coefficients

 $C_{ORB}^{(747)}$ = Coefficient of orbiter in presence of carrier

 $C_{ORB}(ISOL)$ = Isolated orbiter coefficient

Incremental force and moment coefficients were also calculated for the carrier as follows:

$$\Delta c_{747}^{(ORB)} = c_{747}^{(ORB)} - c_{747}^{(ISOL)}$$

where:

 $\Delta C_{747}^{(ORB)}$ = Proximity increment on carrier coefficients

DATA REDUCTION (Concluded)

 $c_{747}^{(ORB)}$ = Coefficient of carrier in presence of orbiter

C747 (ISOL) = Isolated carrier coefficient

Refer to Table VI for a detailed summary.

REFERENCES

Reports and Internal Letters

- IL, SAS/WTO/74-172, Addendum #12, "Sting Design and Fabrication Effort Required for Support of Test CA23 Using Model 48-0/747."
- IL, SAS/WTO/74-172, Addendum #13, "Completion of CA23 Sting Hardware Fabrication," dated February 4, 1975.
- IL, SAS/WTO/74-172, Addendum #14, "Orbiter/747 Attach Hardware for CA23," dated February 18, 1975.
- IL, SAS/WTO/74-172, Addendum #15, "Model Requirements for 0.0125-Scale 48-0/747 Models to Support Tests CA23 and AA2."
- IL, SAS/WTO/74-172, Addendum #17, "Additional Model 48-0 Requirements," dated March 4, 1975.
- IL, SAS/WTO/74-172, Addendum #20, "Model Requirements for 48-0 in Support of Test CA21," dated May 2, 1975.
- IL, SAS/WTO/75-101, "Dimensional Verification of Model 48-0 During CA21 MRR and CA23," dated April 2, 1975.
- SD75-SH-0290A, "Pretest Information for a Test of an 0.0125 Scale Model 48-0 Orbiter/747 Flight Test Configuration in the ARC 14 Foot Tunnel CA23B, June, 1975.

Drawings

- VC70-000002, "Design Geometry Orbiter," dated June 10, 1974.
- SS-A01377, "Orbiter Assembly #48-0, 0.0125-Scale SGV, Ferry Separation," dated August 9, 1974.
- SS-A01559, Fwd. & Aft Attach Supports 48-0, .0125-Scale SSV Orbiter," dated March 11, 1975.
- SS-A01499, "Installation-0.0125-Scale SSV Orb/747, Carrier Ferry Sep., Ames 14-Ft WT (#48-0)," dated January 9, 1975.
- W-1132SA, "Sting Assy 48-0 SSV, Carrier, Ferry/Separation," dated August 9, 1974.

REFERENCES (Concluded)

W-1133SA, "Sting Assy - Orbiter Ferry Separation, #48-0," dated January 13, 1975.

W-1142-SA, "Sting and Sting Adapter-0.0125-Scale SSV Orb., Carrier, Ferry/Separation #48-0," dated January 29, 1975.

W-1048-S, "Sting - (SSV-Delta and Str. Wing), Ames 6X6 SSWT," dated May 6, 1975.

W-1135-A, "Adapter Assy - #48-0 Orbiter/Carrier, Mated," dated August 17, 1974.

The Boeing Company - 747 Carrier

747-MD-461, "General Arrangement - 747 Space Shuttle Orbiter Carrier Aircraft (Piggyback Configuration)," dated July 15, 1974.

747-MD-576, "Structural Arrangement - Orbiter Aft Support, 747 MOD," dated August 1, 1974.

AX 1318I-1, "747 Model Drawings 0.0125 Scale".

TABLE T

EST : CA2	3B			DATE: 11/18/75
		TEST CON	IDITIONS	
MACH NUM	BER	REYNOLDS NUMBER (per ft X 10 ⁶)	DYNAMIC PRESSURE	STAGNATION TEMPERATUR
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.5		3.1	315	70
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		CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
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	SF	400 lb.		
	AF	100 lb.		
	PM			
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	RM YM	250 in1b.		,
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TABLE III (MODEL DIMENSIONAL DATA)

a. Orbiter Model

MUDEL COMPONENT	<u> </u>	
GENERAL DESCRIPTION : The body is	an elemented str	ucture containin
the Crew Module and Cargo Bay. Same	as IML plus l" T	PS.
MODEL SCALE: 0.0125		
DRAWING NUMBER:VC70-000002, SS-AG	01377	
DIMENSIONS:	FULL SCALE	MODEL SCALE
Length $(X_0 = 235 \text{ to } 1519)$, In.	1284.0	16.050
Max Width $(X_0 = 1516.8)$, In.	262.718	3.284
Max Depth ($Xo = 1463.316$), In.	24.8.575	3.107
Fineness Ratio	5.1365	5.1365
Area - Ft ²		
Max. Cross-Sectional	340.82	0.053
Planform		
Wetted	***************************************	
Base		

MODEL COMPONENT : CANOPY (OUTER MOL	D LINE) - C	
GENERAL DESCRIPTION: The canony is t	hat part of the	forward fuselage
which covers the Crew Module. One inch	TPS thickness	on the canopy.
Configuration 1400.		
0.0305		
DRAWING NUMBER: VC70-000002, SS-A0	01377	-
DIMENSIONS :	FULL SCALE	MODEL SCALE
Length $(X_0 = 1.35.196 - 670.0)$, In.	234.80	2.935
Max Width $(X_O = 594.0)$, In.	195.58	2.445
Max Depth		
Fineness Ratio		
Area		
Max. Cross-Sectional		
Planform		
Wetted		······································
Base		
WINDSHIELD PLANES: $.7012 X_02552 Y_06656 Z_05710 X_05641 Y_05965 Z_0 + .2636 X_07564 Y_05965 Z_0 + .2636 X_02636 X_$	32.7354 = 0	

MODEL COMPONENT : ELEVON - E	-	
GENERAL DESCRIPTION 6.0 In. F.S.	caps machined i	nto E ₂ elevon.
Flipper doors, centerbody pieces, and		
are for one side.)		The Carlotte
MODEL SCALE: 0.0125		
DRAWING NUMBER Not available.		
DIMENSIONS :	FULL SCALE	MODEL SCALE
Area - Ft ²	210.00	0.033
Span (equivalent), In.,	349.2	4.365
Inb'd equivalent chord, In.	118.0	1.475
Outh'd equivalent chord, In.	55.19	0.690
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.2096	0.2096
At Outb'd equiv. chord	0.1,001,	0.4004
Sweep Back Angles, degrees		
Leading Edge	0.00	0.00
Trailing Edge	- 10.056 -	10.056
Hingeline (Product of a 7)	0.00	0.00
(Product of area & c) Area Moment (Norskatuschwayecking), Ft	1587.25	0.003
Mean Aerodynamic Chord, In.	90.7	1.134

MOSEL COMPONENT: BODY FLAP - F	1.1	
GENERAL DESCRIPTION: The body flap is a selected at the aft end of the body.		airfoil
MODEL SCALE: 0.0125		
DRAWING NUMBER: VC70-000002		
DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area - Ft ²	135.75	0.021
Span (equivalent), In.	21,1.33	
Inb'd equivalent chord, In.	81.0	1.013
Outb'd equivalent chord, In.	810	1.013
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.0	_0.0
At Outb'd equiv. chord	0.0	0.0
Sweep Back Angles, degrees		
Leading Edge	0.0	0.0
Tailing Edge	0.0	_0,0
Hingeline (Product of Area & c) 3 Area Moment (Normal/stockingersking), Ft	916.31	0.0018
Mean Aerodynamic Chord, In.	81.0	1.013

MODEL COMPONENT : OMS PODS (ON	1L) - M ₁₈	
GENERAL DESCRIPTION : The OMS pods	are nacelles hous	ing the maneuvering
engines and are located on the fusela	ge on either side	of the vertical
tail. Same as INL plus 1/2" TPS.		
MODEL SCALE: 0.0125		
DRAWING NUMBER: VC70-000002, VL70	-84,3001	
DIMENSIONS :	FULL SCALE	MODEL SCALE
Length $(X_0=1311 - 1511)$, In.	200.00	2.500
Max Width $(X_O = 304)$, In.	135.75	1.697
Max Depth $(X_O = 30l_t)$, In.	74.5	0.931
Fineness Ratio		
Area - Ft ²		
Max. Cross-Sectional	58.169	0.009
Planform		
Wetted		
Base		

TABLE III (Cont'd) a. Orbiter Model

MODEL COMPONENT: MASS NOZZLES - Ngl,	oiter Model	
GENERAL DESCRIPTION: The main propulsion	on nozzles are lave	al-bell shaped
and are located on the aft planes of the or	biter. These dim	ensions are ex
ternal and are not to be scaled for plume t	ests.	
MODEL SCALE: 0.0125		
DRAWING NUMBER: <u>VC70-000C02</u> , VL70-008144;	RS009169, RS00910	07, 131/15000
DIMENSIONS:	FULL SCALE	MODEL SCALE
MACH NO.		
Length - In. Gimbal Point to Exit Plane Throat to Exit Plane	157.00	1.963
Diameter - In. Exit Throat Inlet	97.914	1.224
Area - ft ² Exit Throat	<u>52.290</u>	0.008
Gimbal Point (Station) - In. Upper Nozzle VO YO ZO	1445.0 0.0 443.0	18.063 0.0 5.538
Lower Nozzles X O YO 20	1468.170 53.00 31.2.640	18.352 0.663 4.283
Null Position - Deg. Upper Nozzle Pitch Yaw	16.0 0.0	16.0 0.0
Lower Nozzle Pitch Yaw	10.0 3.5	10.0 3.5

MODEL COMPONENT:	NOZZLES - N9?		•
GENERAL DESCRIPTIO	N: The two orbiter maneuv	vering system	nozzles are lavel-bell
shaped and are lor	nated at the aft end of the OM		
	not to be used for plume tests		
MODEL SCALE:	0.0125		
DRAWING NUMBER:	MC62100009, VC70-000002, VL7	0-008401 Asra	niet lidiooo
DIMENSIONS:			
MACH NO.		FULL SCALE	MODEL SCALE
Length - In. Gimbal Poin Throat to E	it to Exit Plane Exit Plane	56.00 56.00	0.700
Diameter - In. Exit Throat Inlet	·	45.09	0.564
Area - ft ² Exit Throat		11.09	0.139
Gimbal Point (St	tation) - In.		
X Y Z		1518.0 88.0 492.0	18.975 1.100 6.150
Null Position -	Deg.		
Pitch Yaw		15.82° 6.5°	15.82° 6.5°
	•		

MOD	EL COMPONENT RUDDER - R18		
GEN	ERAL DESCRIPTIONThe rudder i	s a secondary mov	able airfoil at the
<u>trai</u>	lling edge of the vertical fin tha	t imparts yaw for	ces. This dimensional
data	was calculated from the OML mast	er dimensions 7-1	9-74.
MOD	DEL SCALE: 0.0125		
DRAY	WING NUMBER		
DIME	NSIONS	FULL SCALE	MODEL SCALE
name.	Area = Ft^2	97.148	0.015
	Span (equivalent) , In.	198.614	2.483
	Inb'd equivalent chord, In.	90.07	1.126
	Outb'd equivalent chord , In.	50.80	0.635
	Ratio movable surface chord/ total surface chord		
	At Inb'd equiv. chord	0.400	0.4,00
	At Outh'd equiv. chord	0.400	0.400
	Sweep Back Angles, degrees		
ORIGINAL PAGE IS OF POOR QUALITY	Leading Edge	34.833	34.833
OI TOOL GOLDEN	Trailing Edge	26.249	26.249
	Hingeline (MAC X AREA, Ft ³)	34.833	34.833
	Area Moment (Ninocurchanochungechinne)	584.99	0.0011
	Mean Aerodynamic Chord, In.	72.260	0.903

TABLE III (Cont'd) a. Orbiter Model

MODEL COMPONENT: VERTICAL - V ₂₃ (Outer Mold Lir	er Model nes)	
GENERAL DESCRIPTION: The vertical tail is doubt dorsally on the aft fuselage. These data corre	ole-wedge shap	
MODEL SCALE: 0.0125 DRAWING NUMBER: VC70-000002 master dimensions	3.	
DIMENSIONS:	FULL SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo) - Ft ² Planform Span (Theo) - In. Aspect Ratio Rate of Taper Taper Ratio Sweep-Back Angles, Degrees. Leading Edge Trailing Edge 0.25 Element Line Chords: Root (Theo) WP Tip (Theo) WP MAC Fus. Sta. of .25 MAC W.P. of .25 MAC B.L. of .25 MAC	413.253 315.72 1.675 0.507 0.404 45.000 26.25 41.13 268.50 108.47 199.81 1463.50 635.52 0.0	0.065 3.947 1.675 0.507 0.404 45.000 26.25 41.13 3.356
Airfoil Section Leading Wedge Angle - Deg. Trailing Wedge Angle - Deg. Leading Edge Radius	10.00 14.92 2.00	10.00 14.92 0.0250
Void Area	13.17	0.002
Blanketed Area	0.0	0.0

MING-WING	Orbiter Model	
PEMERAL DESCRIPTION:		
MOTO: Identical to Will except airfoil thickn	ess. Dihedral a	nele is along
trailing edge of wing. Geometric twist		
MODEL SCALE: 0.0125		
1501 NO.	DWG. NO. 1	0-0001404 -000200
DIMENSIONS:	FULL-SCALE	MODEL SCALE
Protection of the control of the con	2690.00 936.68 2.265 1.177 0.200 3.500 0.500 45.00 -10.056 35.209 689.24 137.85 474.81 1136.83 290.58 182.13 1751.50 720.68 2.059 0.245 562.09 137.85 392.83 1185.98 294.30 251.77	0.420 11.709 2.265 1.177 0.200 3.500 0.500 45.00 10.056 35.209 2.616 1.723 5.935 14.210 3.632 2.277 0.274 9.009 2.059 0.245 7.026 1.723 4.910 14.825 3.679 3.147
XXXX64 Root b =	0.113	0.113
Tip <u>b</u> =	0.120	0.120
Data for (1) of (2) Sides Leading Edge Cuff Planform Area St2 Leading Edge Intersects Fus H. L. @ Sta Leading Edge Intersects Winn 8 Sta	113.19 500.0	0.0177 6,250

MODEL COMPONENT : ORBITER TATE	CONF - TO	
GENERAL DESCRIPTION: Fairing mouterry missions configuration.	•	selare base for
MODEL SCALE: 0.0125		
DRAWING NUMBER : SS-A01452		
DIMENSIONS :	FULL SCALE	MODEL SCALE
Length	435.76	5.447
Max Width	300.80	3.76
Max Bept Height	266.40	3.33
Fineness Ratio Area - Ft ²		
Max. Cross-Sectional	462.37	0.0722
Planform	635.803	0.0993
Wetted		

b. Carrier Model

MODEL COMPONENT: ATTACH STRUCTURE - AT96

GENERAL DESCRIPTION: Forward attach structure between the Orbiter and

Carrier, faired struts, $i_0 = 4^{\circ}$

MODEL SCALE: 0.0125

DRAWING NO.: Boeing Dwg. 747-ND-654, SS-A01559-4, -18, -35

	FULL SCALE	MODEL SCALE
	4.0	4.0
, In.	31.0	0.388
	0.226	0.226
BST'A	689.4	8.617
BWL	372.0	4.650
BL	66.3	0.829
X _O	388.15	4.852
^Z o	283.11	3.539
Υ	0.0	0.0
BSTA	681.52	8.519
BWL	480.4	6.005
	BWL BL XO ZO Y BSTA	BSTA 689.4 BWL 372.0 BL 66.3 X ₀ 388.15 Z ₀ 283.11 Y 0.0 BSTA 681.52

b. Carrier Model

MODEL COMPONENT: ATTACH STRUCTURE - AT97

GENERAL DESCRIPTION: Forward attach structure between the Orbiter and

Carrier, faired struct, $i_0 = 6$ °

MODEL SCALE: 0.0125

DRAWING NO.: Boeing Dwg 747-MD-654, SS-A0159-3, -11, -35

DIMENSIONS:		FULL SCALE	MODEL SCALE
i _O , Incidence angle, deg. (Orbiter FRL to 747 FRL)		6.0	6.0
Fairing chord, right and left, In.		31.0	0.388
Fairing t/c		0.226	0.226
Carrier attach points, In.	BSTA	689.4	8.617
	BWL	372.0	4.650
	BL	66.3	0.829
Orbiter attach point, In.	x_0	388.15	4.852
	z_0	283.11	3 .53 9
	Yo	0.0	0.0
	BSTA	684.88	8.561
	BWL	512.72	6.409

h. Carrier Model

MODEL COMPONENT: ATTACH STRUCTURE - AT98

GENERAL DESCRIPTION: Forward attach structure between the Orbiter and

Carrier, faired struts, $i_0 = 8^{\circ}$

MODEL SCALE: 0.0125

DRAWING NO.: Boeing Dwg 747-MD-654, SS-A01559-5, -19, -35

DTHENSIONS:		FULL SCALE	MODEL SCALE
i ₀ , Incidence angle, deg. (Orbiter FRL to 747 FRL)		8.0	8.0
Fairing chord, right and left, In.		31.0	0.388
Fairing t/c		0.226	0.226
Carrier attach points, In.	BSTA	689.4	8.617
	BWL	372.0	4.650
	BL	66.3	0.829
Orbiter attach points, In.	χ ^O	388.15	4.852
	z_0	283.11	3. 539
	Y ₀	0.0	0.0
	BSTA	689.4	8,617
	BWL	5LL-72	6,809

b.. Garrier Model

MODEL COMPONENT: ATTACH STRUCTURE - AT99

GENERAL DESCRIPTION: Aft attach structure between orbiter and carrier, same as AT₉₅ with a single fairing covering the main strut and drag strut on each side, and a fairing on the sway brace.

MODEL SCALE: 0.0125

DRAWING NO.: Boeing Dwg 747-MD-658, W-1135A-11, -12, SS-A01559-33, -34, -35

			·
DIMENSIONS:		FULL SCALE	MODEL SCALE
Orbiter attach points, In.	x_{O}	1317.0	16.462
	YO	± 96.51	<u>+</u> 1.206
	Z , BL	267.5	3.344
	BSTA	1607.0	20.087
	BWL	1,00.0	5.000
Main fairing:			
Root chord, In.		250.0	3.125
T/c of root chord		0.09	0.09
Tip chord, In.		120.0	1.500
T/c of tip chord		0.14	0.14
Sway brace:			
Chord, In.		31.0	0.388
T/c		0.226	0.226

MODEL COMPONENT: BODY - Boy g		
GENERAL DESCRIPTION : Pody 74-	-7 Project with A.P.V.	
MODEL SCALE: 0.0125	MODEL DWG: 13181-	1
DRAWING NUMBER: 65013609, 131	8-5!:	
DIMENSIONS :	FULL SCALE	MODEL SCALE
Length , In.	2702.0	33.78
Max Width , In.	255_3	3.19
Max Depth		-
Fineness Ratio	9.73	9.73
Area - Ft ²		
Max. Cross—Sectional		
Planform		***************************************
. Wetted	14.093	0.002
Base		

b. Carrier Model

MODEL COMPONENT: WING - W44.1

GENERAL DESCRIPTION: Sweet 747 wing

MODEL SCALE:	0.0125	MODEL DWG:	13181-1
ODES OURS	U. U.L.	MODEL DWG:	T: 3TQT-

DRAWING NO.: 65013609, 1318-46

DIFENSIONS:	FULL SCALE	MODEL SCALE
Total Data:		
Area (Theo.), Ft ²		
Planform	5500.00	0.860
Span (Theo.), In.	2348.0	29.35
Aspect ratio	6.96	6.96
Incidence angle, deg.	7.0	7.0
Chords, In.:		
MAC	327.8	4.10
Fus. sta. of 0.25 MAC	1339.87	16.75
W.P. of 0.25 MAC	190.42	2.38

b. Carrier Model

MODEL COMPONENT: VERTICAL - V9.1

GENERAL DESCRIPTION: Swept vertical tail

MODEL SCALE: 0.0125 MODEL DWG: 1318I-1

DIMENSIONS:		FULL SCALE	MODEL SCALE
TOTAL	DATA		
	Area (Theo), Ft ²	630.0	0.098
	Span (Theo), In.	386.5	4.830
	Sweepback angles, deg., L.E.	50.12	50.12
	Aspect ratio	1.25	1.25
	Chord:		
	Root (Theo), WP, In.	461.67	5.77
	Tip (Theo), WP, In.	157.0	1.96
	Mean Aerodynamic Chord, In.	334.16	4.20
	Fus. Sta. of 0.25 MAC	2529.6	31.62
	W.P. of 0.25 MAC	528.0	6.60

TABLE III (Cont'd) b. Carrier Model

MODEL COMPONENT: HORIZOUTAL TAIL - H₁₅

GENERAL DESCRIPTION: Swept 747 horizontal stabilizer

11000 HO.: 11181-1	MODEL SCALE:	0.0125	MODEL NO.:	13181-1
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• • • • • • • • • • • • • • • • • • • •		
DIMENSIONS:	FULL SCALE	MODEL SCALE
Area (Theo.), ft ²		
Planform	1470.0	0.230
Span (Theo), In.	873.00	10.91
Aspect ratio	3.6	3.6
Chords:		
MAC, In.	271.6	3.40
Fus. Sta. of 0.25 MAC, In.	2563.9	32.05
W.P. of 0.25 MAC, In.	175.0	2.19
Sweepback angle of 0.25 MAC, deg.	37.5	37.5

TABLE III (Cont'd) b. Carrier Nodel

MODEL COMPONENT: HORIZONTAL TAIL - H15.6

GENERAL DESCRIPTION: Horizontal tail, H_{15} , with vertical fins on each

tio at body B.L. 427.3

MODEL SCALE: 0.0125 MODEL DWG: 13181-1

DRAWING NO.: 65013609, 1318-5, 1318-70

DIMENSIONS:		FULL SCALE	MODEL SCALE
Fin	Exposed Data (one side):		
	Area = Ft^2	200.0	0.0312
	Span, In.	252.0	3.15
	Chord. In.	113.6	1.1.2

TABLE III (Cont'd) b. Carrier Model

MODEL COMPONENT: 1125

GENERAL DESCRIPTION: Inboard 747, JT9D nacelle strut

MODEL SCALE: 0.0125 MODEL DWG: 13181-1

DRAWING NO.: 65013609, 1318-60

DIMENSIONS:

Wing B.L. of nacelle C_L, In.

470.0

5.875

Cant angle deg., inboard

2.0

2.0

b. Carrier Model

MODEL COMPONENT: M26

GEMERAL DESCRIPTIOM: Outboard 747, JT9D

Strut

MODEL SCALE: 0.0125 MODEL DWG: 13181-1

DRAWING NO.: 65013609, 1318-60

DIMENSIONS: FULL SCALE MODEL SCALE WOLL SCALE WOLL SCALE 10.425

Cant angle, deg. inboard 2.0 2.0

b. Carrier Model

MODEL COMPONENT: N57

GENERAL DESCRIPTION: Inboard fan cowl and primary 747 nacelle, flow-

through type.

MODEL SCALE: 0.0125

MODEL DWG: 1318I-1

b. Carrier Model

MODEL COMPONENT: N₅₈

MODEL DESCRIPTION: Outboard fan cowl and primary 747 nacelle, flow-

through type.

MODEL SCALE: 0.0125 MODEL DWG: 13181-1

b. Carrier Model

MODEL COMPONENT: SPOILERS - S1-12

GENERAL DESCRIPTION: Multi-panel flight spoilers. Four outboard and two inboard spoilers per side. Subscript denotes spoiler panel S_1 is the most outboard L.H. panel and S_{12} is most outboard R.H. panel.

MODEL SCALE: 0.0125

MODEL DWG: 13181-1

DIMENSIONS: (OME PANEL)	FULL SCALE	MODEL SCALE
Outboard S_{1-4} and S_{9-12} (Ft ²)	21.48	0.0034
Span (equivalent), In.	75.00	0.94
Chord, In.	41.28	0.52
Inboard, S_{5-6} and S_{7-8} (Ft ²)	35.31	0.0055
Span (equivalent), In.	90.00	1.130
Chord, In.	56.52	0.71

TABLE III. (Continued)

b. Carrier Model

MODEL COMPONENT: T14

GENERAL DESCRIPTION: Flap track fairings, four on each side

MODEL SCALE: 0.0125

DIVENSIONS:	FULL SCALE	MODEL SCALE
WBL of Track No. 1, In.	235.3	2.94
2, In.	353.0	4.41
3, In.	585.0	7.31
4, In.	743.6	9.30
Distance from wing		
Trailing edge to:		
Track trailing edge, In.	44.0	0.55

TABLE III. Concluded.

MODEL COMPONENT : Mounting Strut - S1	
GENERAL DESCRIPTION : Blade strut attachment to	
fuselage where vertical tail is normally mounted	d. Strut leading edge
and lower trailing edge conform to the vertical	tail planform. Airfoil
section is blunted diamond. The tip of the stru	t mounts to a sting.
MODEL SCALE: 0.0125 DRAWING NUMBER: Rockwell W-11335H	
DIMENSIONS :	MODEL SCALE
Theoretical intersection of L.E. with fuselage ML, in.	
χ _o	15.973
z _o	6.250
Leading edge sweep angle, deg.	45.0
Trailing edge sweep angle, deg.	45.0
chord length, in.	2.38
maximum thickness, in.	0.52
distance from L.E. to maximum thickness, in.	1.42
position of sting &, in. Z _o	12.835

TABLE IV. CA23B DATASET DESCRIPTION

(INTERPOLATED/INCREMENTED DATASETS)

DATASET TYPE	DESCRIPTION
RNHXXX	Stability axis coefficient data for 747 carrier.
ANHXXX	Body axis coefficient data for 747 carrier.
BNHXXX	Pressure coefficient data for 747 carrier.
CNHXXX	Stability axis coefficient data for Orbiter.
DNHXXX	Body axis coefficient data for Orbiter.
ENHXXX	Pressure coefficient data for Orbiter.
UNH <u>*</u> XX	Interpolated data for 747 carrier.
VNH <u>*</u> XX	Interpolated data for Orbiter (α _C 2nd indep. var.)
ZNH <u>*</u> XX	Interpolated data for Orbiter (α _O 2nd indep. var.)
PNH <u>*</u> XX	Incremental proximity effects data for 747 carrier.
TNH <u>*</u> XX	Incremental proximity effects for Orbiter. (a _O 2nd indep. var.)
4NH <u>*</u> XX	Incremental proximity effects for Orbiter. $(\alpha_C$ 2nd indep. var.)

^{*} 0 = IORB interpolation

X = IORB and DX interpolation

Y = IORB and DY interpolation

M = MACH interpolation

TABLE V.

CA23B COEFFICIENT SCHEDULE

יי		701	-					COEFFICIENTS	CIENTS				
Type	naraser sequence	ist iD.	Znd 10.	-	2	က	4	5	9	7	∞	6	2
RNHXXX	004-005	Zū	ALPHAC	МАСН	ีย	8	2	ح	>	I a C			2
	008-025,027-042			MACH	ALPHAO	XO	λO	2	9	CLM CLM	ک	CYN	CBI
ANHXXX	004-005			BETAC	PHIC	CA	N.	CSI	N				3
>	008-025,027-042			BETAC	BETA0	PHIC	PHIO	S	S	CSL	CLN		
DINHAAA	004-005			XZCP	XYCP	CPCC	CPSB1	CPSB2					
	008-025,027-042			XZCP	XYCP	CPCC	CPSB1	CPSB2					
CNHXXX	008-025,027-042		>-	MACH	ALPHA0	χα	ργ	7	8	2	>	N Y	ā
	043-046	-	AL PHA0	MACH	J J	23	CLM	ح	NAS	S S	5	2	CDL
T	047-048	ΧO	AL PHA0	MACH	CI	93	CLM	λ)	CVN	CBI	0.7		
DNHXXX	008-025,027-042	70	ALPHAC	BETAC	BETAO	DHIC	PHIO	CA	S	S	N I		
	043-046	ZO	AL PHA0	BETA0	PHIO	S	NS	SSI	Z		200		
T	047-048	ΧO	ALPHAO	BETA0	PHIO	S	N	ISS	2	12			
FNHXXX	008-0.25,027-042	ZO	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPR3	CPE3	CDC1	6505	
 {	043-046	ZO	AL PHA0	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPC32	
	047-048	ă	ALPHAO	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPF3	CPS1	CP C2	
KXOHNI	008-011,013	ZO	ALPHAC	IORB	MACH	ŏ	À	2	5	N C	2	NA C	و
{	020-025,027								3 -		5	5 -	20-
	034-035,040												1
UNHXXX	010,013-017									-			Ŧ
	027-031,034										-		\bot
UNHYXX	010,013,018-019												-
	027, 032-034												1
UNHMXX	040-042	>											-

TABLE V. CA23B COEFFICIENT SCHEDULE (Continued)

Dataset Type							ی	COEFFICIENTS	SLN				
	Dataset Sequence	lst ID.	2nd ID.	-	2	ю	4	5	9	7	8	6	10
× × × × × × × × × × × × × × × × × × ×	008-011,013	ZO	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	СУ	CYN	CBL
YAHOYY YAHOYY	020-025,027												
	034-035,040												-
VNHXXX	010,013-017												
VVV	027-031,034												
VNHYXX	010,013,018-019												
l	027,032-034												
VNHMXX	040-042		>	\	-								
VACILIAY	008-011,013		ALPHA0	MACH	ALPHAC								
VYOUNZ	020-025,027												
	034-040												
ZNHXXX	010,013-017												
WV	027-031,034												
ZNHVXX	010,013,018-019												
1	027,032-034												
ZNHMXX	040-042			->	•	>-	>		-	-			>
AAUTING	008-011,013		ALPHAC	DCL	aco	DCLM	DCY	DCYN	DCBL				
VYOUNI	020-025,027												
	034-040										_		
PNHXXX	010,013-017												
	027-031,034							_					
DNHVXX	010,013,018-019												
-	027,032-034		-	>	_	-	>	-	-				

CA23B COEFFICIENT SCHEDULE (Concluded) TABLE V.

	Dataset Dataset Sequence	Jce	lst ID.	2nd ID.					COEFFICIENTS	ENTS				
DCL DCD DCLM DCY DCYN					-	2	m	4	5	9	7	∞	6	10
	008-011,013 DZ ALP		ALP	ALPHAO	DCL	000	DCLM	DCY	DCYN	DCR!				
	020-025,027													
	034-040													
	010,013-017													
	027-031,034													
	010,013,018-019													
	027,032-034		-		-									
	008-011,013 ALPHAC	ALPH	ALPH	γ										
	020-025,027													
	034-040													
	010,013-017													
	027-031,034													
	010,013,018-019								<u> </u>					
	027,032-034	->-			•	>	>	_		-				

= IORB interpolation 0.

= IORB and DX interpolation

IORB in parameter block is a nominal value.

ID = independent variable.

NOTE: IORB = ALPHAO (α_0) - ALPHAC (α_C)

= IORR and DY interpolation

Σ

= Mach interpolation

TABLE VI.

INCREMENTAL DATA SET SUMMARY

(refer to Data Reduction)

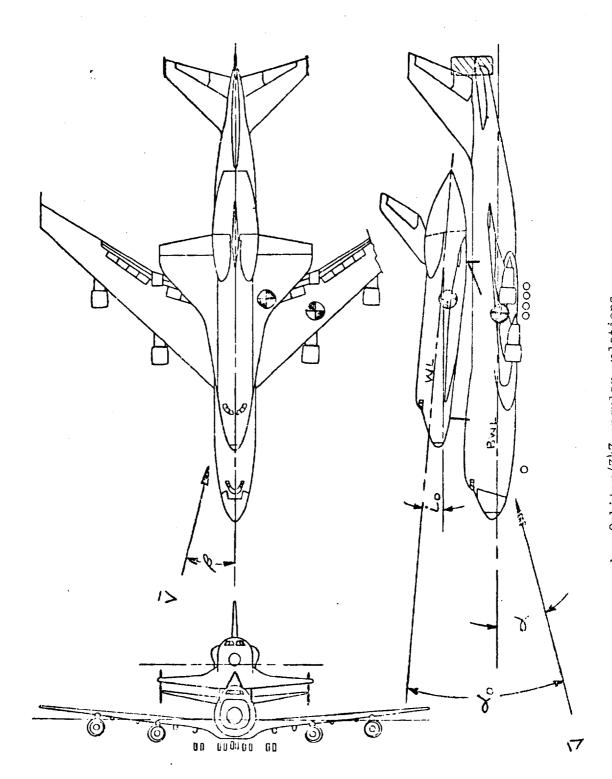
ΔC747 (ORB)	C747 (ORB)	C747 (ISOL)	ΔCORB (747)	CORB (747)	CORB (ISOL)
PNHOO8	UNHOO8	RNHOO4	тиноо8	ZNHOO8	CNHO43
PNHOO9	UNHOO9	RNHOO4	TNH009	ZNHOO9	CNHO43
PNHO10	UNHO10	RNHOO5	TNHO10	ZNHOlO	CNHO43
PNHX10	UNHX10	RNHOO5	TNHX10	ZNHX10	CNHO43
PNHY10	UNHY10	RNH005	TNHYLO	ZNHY10	CNHO43
PNH011	UNHOll	RNHOO4	TNHOll	ZNHOll	CNHO43
PNHO13	UNHO13	RNHOO5	TNHOL3	ZNHO13	CNHO#3
PNHX13	UNHX13	RNHOO5	TNHX13	ZNHX13	сино́+3
PNHY13	UNHY13	RNH005	TNIIY13	ZNHY13	CNHO)+3
PNHX14	UNHX14	RNHOO5	TNHX1	ZNHX1 ¹ i	CNHO)t3
PNHX15	UNHX15	RNHOO5	TNHX15	ZNHX15	CNIIO) 3
PNHX16	UNHX16	RNH005	тинх1 б	znhx16	CNIIO43
PNHX17	UNHX17	RNH005	TNHX17	ZNHX17	CNHO43
PNHY18	UNHY18	RNHOO5	TNHY18	ZNHY18	CNHO1+3
PNHY19	UNHY19	RNHOO5	TNHY19	ZNHY19	CNHO43
PNH020	UNHO20	RNH005	TNHO20	ZNHO20	сино46
PNHO21	UNHO21	RNHOO4	TNHO21	ZNHO21	CNHO46
PNH022	UNHO22	RNHOO5	TNHO22	ZNH022	сино46
PNHO23	UNHO23	RNH005	TNHO23	ZNHO23	CNHO46
PNHO24	UNHO24	RNHOO4	TNHO24	ZNHO24	CNHO46
PNHO25	UNHO25	RNHOO4	TNHO25	ZNHO25	сино46
PNHO27	UNHO27	RNHOO5	TNHO27	ZNHO27	CNHO45
PNHX27	UNHX27	RNHOO5	TNHX27	ZNHX27	CNHO45
PNHY27	UNHY27	RNH005	TNHY27	ZNHY27	CNHO45
PNHX28	UNHX28	RNHOO5	TNHX28	ZNHX28	CNHO45
PNHX29	UNHX29	RNHOO5	TNHX29	ZNHX29	CNHO45
PNHX30	UNHX30	RNHOO5	OEXHN'T	ZNHX30	CNHO45 CNHO45
PNHX31	UNHX31	RNH005	TNHX37	ZNHX31	CNHO45
PNHY32	UNHY 32	RNH005	TNHY32	ZNHY32	CNHO45
PNHY33	UNHY33	RNHOO5	TINHY 33	ZNHY33	CNHO45
Р ино З ⁴	UNHO34	RNHOO5	TNHO3)	ZNHO34	CNHO45
PNHX34	UNHX34	RNHOO5	TNHX 3 ¹ 4	ZNHX3h	CNHO45
PNHX37	UNHY34	RNHOO5	TNHY 34	ZNHY34	CNHO45
PNHO35	UNHO35	RNHOO5	TNH035 TNH036	znho35 znho36	CNHO45
PNH036	UNHO36	RNHOO5	_		CNHO1/5
PNHO37	UNH037	RNHOO4	TNHO37	znho37 znho38	CNHO44
PNH038	UNHO38	RNHOO5	TNHO38		CNHO44 CNHO43
PNHO39	UNHO39	RNHOO5	TNHO39	ZNHO39 ZNHO40	CNHO43
PNHO40	UNHO40	RNHOO5	TNHO40	ZNIIU40	CMUOAC

N³

Figure 1. - Axis Systems.

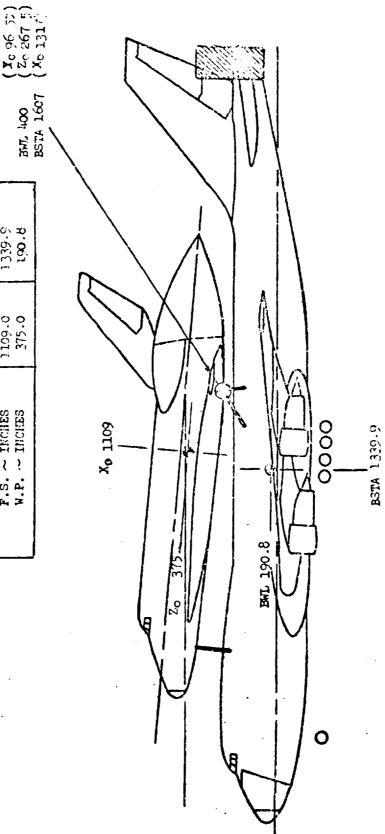
Orbiter

с с

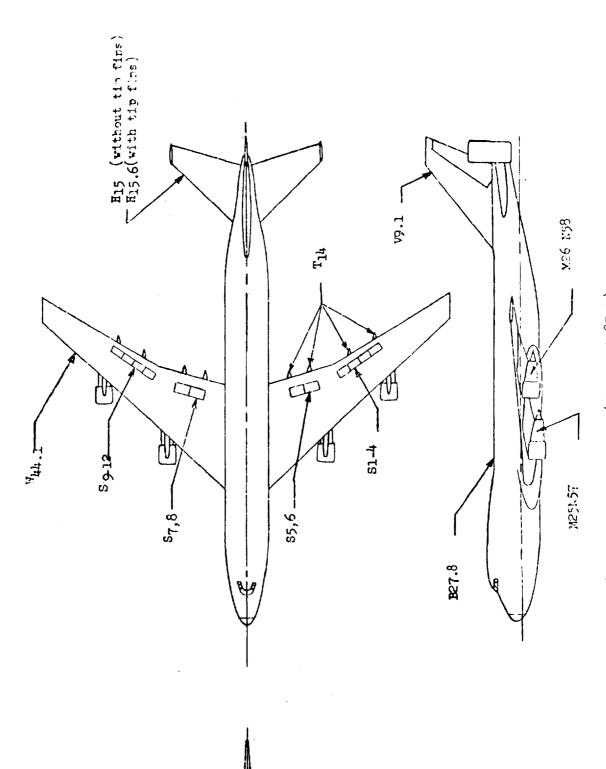


b. Orbiter/747 angular relations Figure 1. - Concluded.

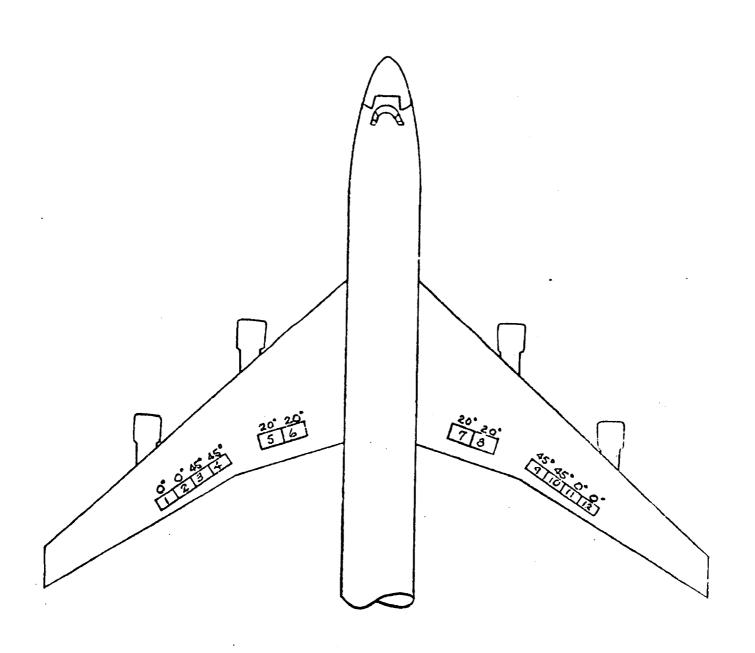
	747 CARRIER
56က	5500
19.7/2	327.75
936.68	2348.01
MOMENT REFERENCE CENTER 67.5% La	25.0 € €
1109.0	1339.9 19 0. 8
~	- 0 m



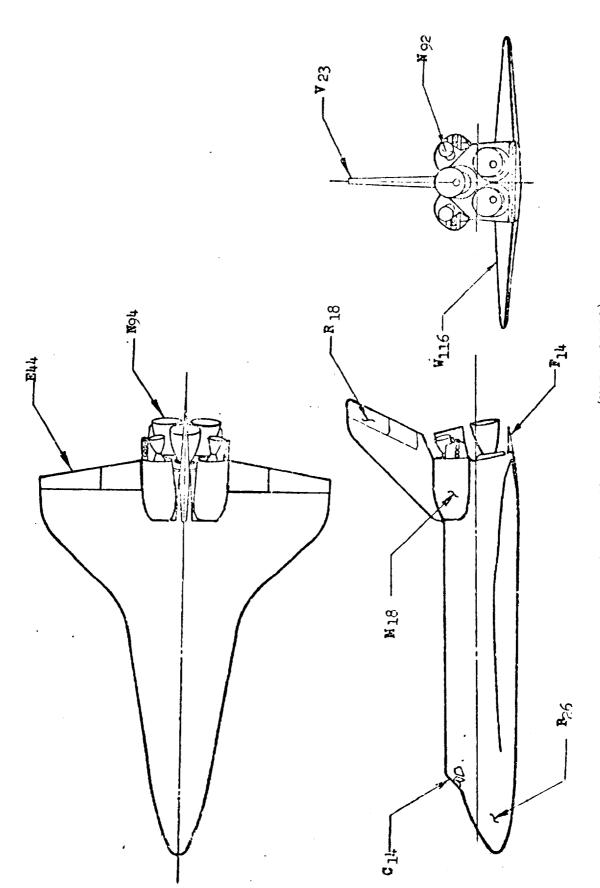
a. Orbiter/747 flight test configuration reference dimensions Figure 2. - Model Sketches



b. 747-100 configuration (Model 1318I-1) Figure 2. - Continued.

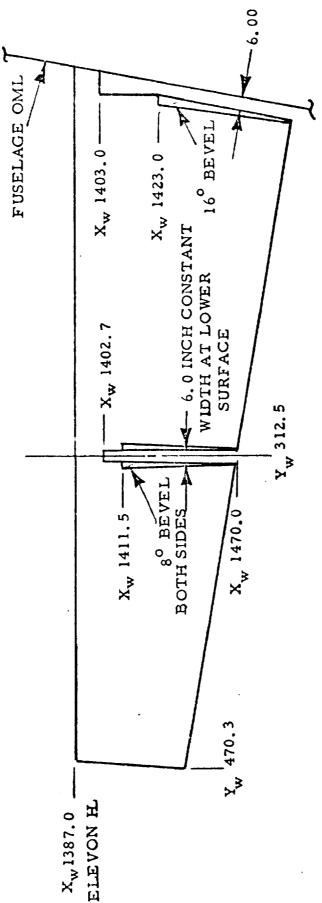


c. In-flight spoiler configurationFigure 2. - Continued.



4. SSV Orbiter Configuration (VC70-000002)
Figure 2. - Continued.

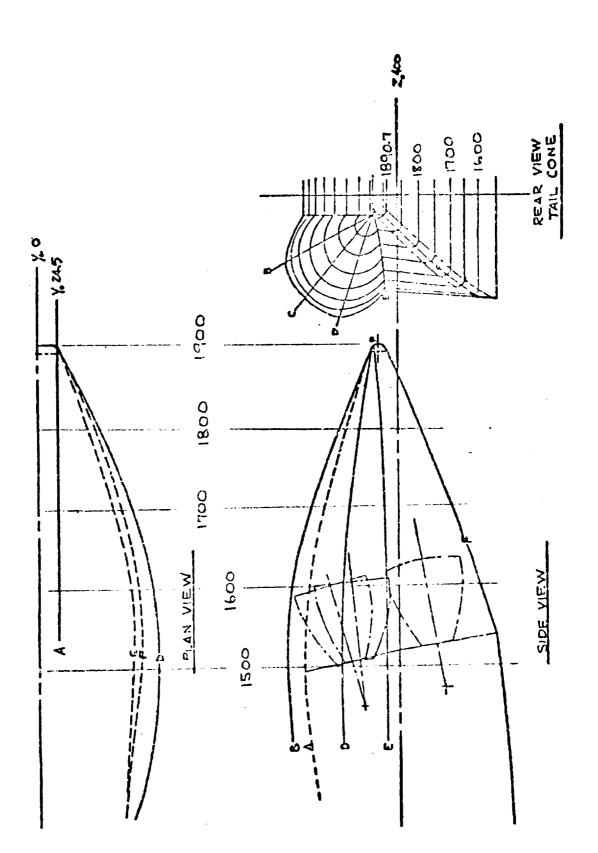
 \mathbf{E}_{44} elevon with 6.0 inch gaps installed. Flipper doors, centerbody pieces, and tip seals are not simulated.



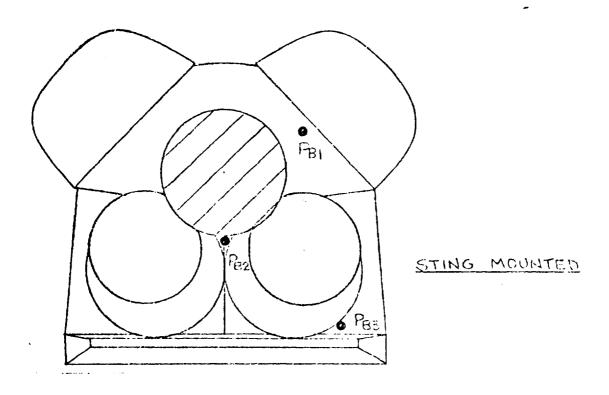
(ALL DIMENSIONS ARE FULL SCALE, INCHES)

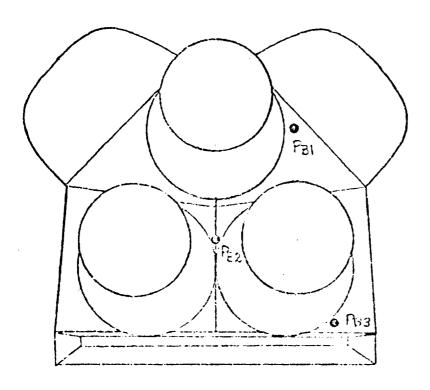
(VIEW IS PERPENDICULAR TO WING REFERENCE PLANE)

e. Elevon - $E_{l_1 l_1}$ Figure 2. - Continued.

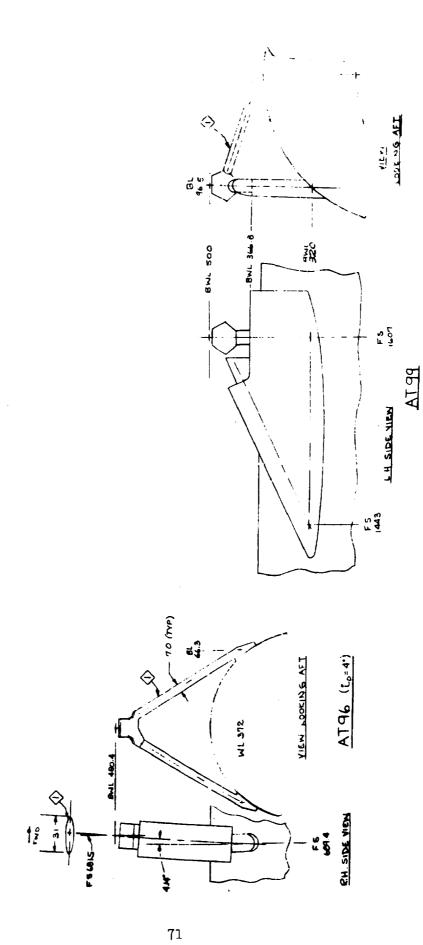


f. Orbiter tail cone TC_{μ} (X_{3B}) Figure 2. - Continued.

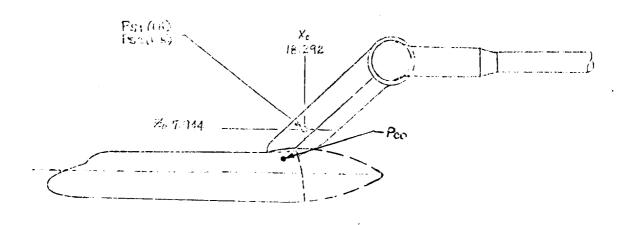


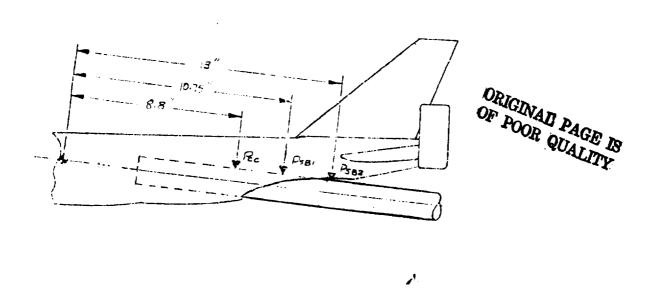


g. Orbiter base pressure tap locations
Figure 2. - Continued.



h. Orbiter/747 attach hardware AT96 and $\mathrm{AT99}$ Figure 2. - Continued.



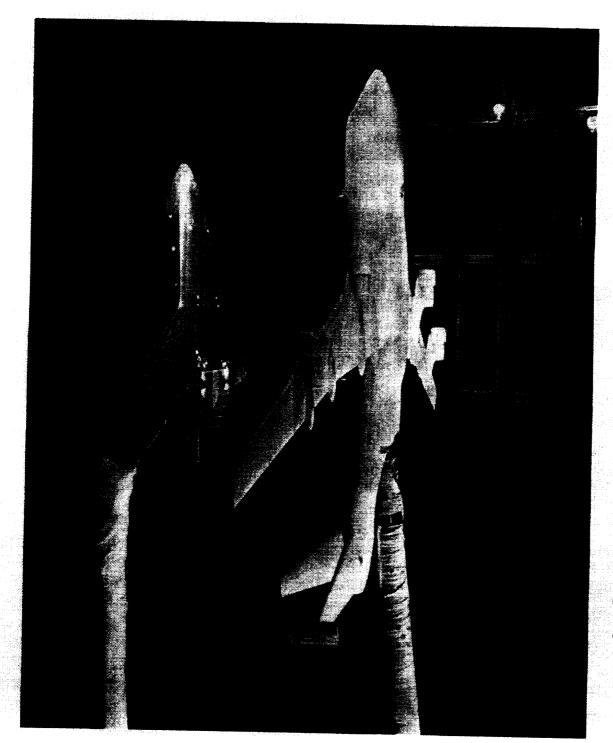


i. 747 sting cavity and orbiter blade strut pressure tap locations
 Figure 2. - Concluded.

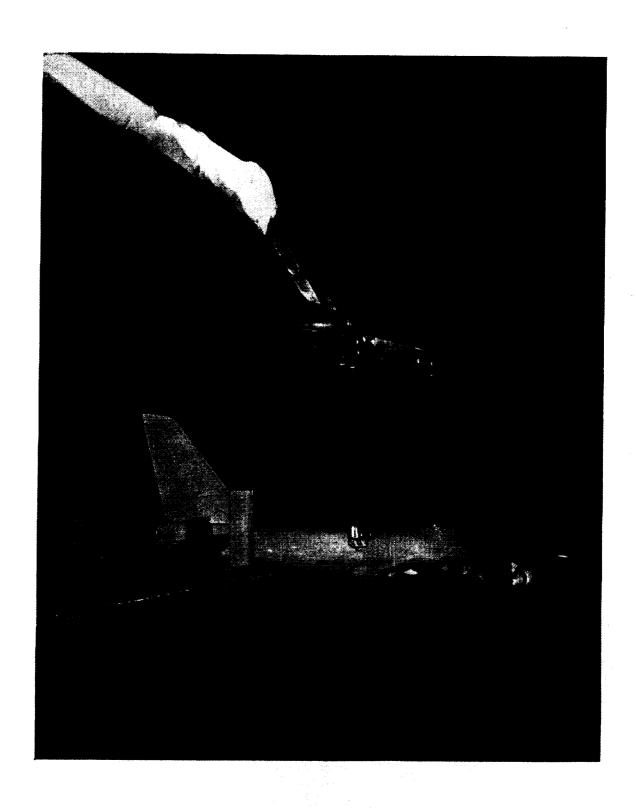


Figure 3. - Model Installation Photographs.

ORIGINAL PAGE IN OF POOR QUALITY



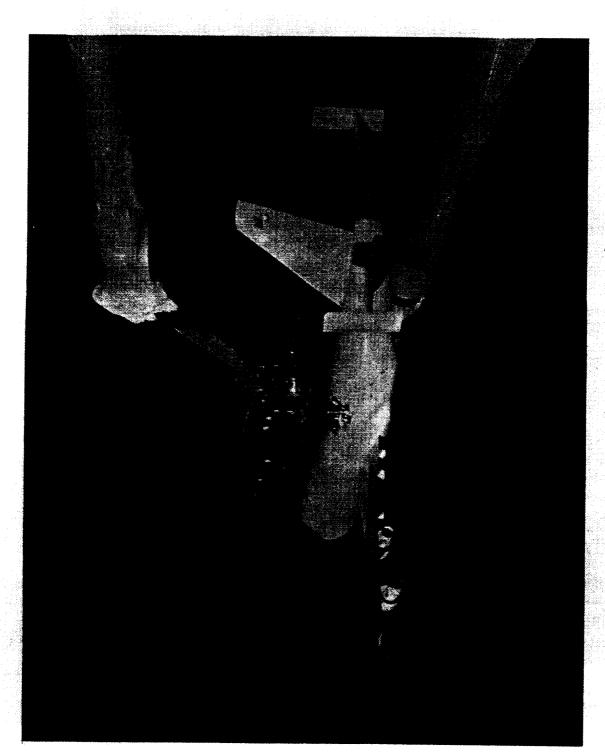
b. Separation of Orbiter with TC_k in proximity to 747 carrier Figure 3. - Continued.



c. Three-quarter rear view showing aft attach fairings on 747 with Orbiter separated

Figure 3. - Continued.





d. Orbiter Without TC_k in proximity to 747 carrier
 Figure 3. - Continued.

APPENDIX

TABULATED SOURCE DATA

Tabulated plotted data may be obtained upon request from Data Management Services.

DATE 22 MAR 76	76	TABULATED	SOURCE DATA - CA23B		747/1 ATI				(RNH004)	PAGE 1 (08 0CT 75)	
	REFERENCE DATA	ATA						PARAI	PARAMETRIC DATA		
SREF	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.	# # # #	1 339,9000 1 0000 1 1 90,7500 1	IN. XC IN. YC IN ZC			BETA RUDDER	# # # #	.000 STAB		
		RUN NO.	41/ 0 RN/L	L = 3.40	GRADIENT	GRADIENT INTERVAL =	-5.00/	5.00			
	DZ	ALPHAC	MACH	ಕ	8	CLM	ζ	CYN	CBL		
	131.927	-5.187	59363	+306+	.07664	. 25812	.00224	~:00282	.00054		
	131.734	-3.634	. 59393	36247	. 06026	.22770	. 00350	00267	.00015	•	
	131.585	-2.584	.59370	27172	.05288	. 20400	.00513	0024 9	00042		
	131.467	-1.696	. 59291	18543	.04771	.17618	.00 692	0024 6	.00058		
	131.339	712	. 59315	09488	.04553	.15059	06800	00231	₽5000.		
	131.218	186	. 59328	01062	.04518	. 12665	.011 9 4	00263	.00012		
10	131.073	1.254	. 59202	. 08467	. 04543	. 10025	.01167	00204	01100.		
)R	130.941	2.216	.59205	.17312	+17+0.	. 07877	.01351	00211	98000.		
I	130.832	3.190	. 59291	. 25409	. 04987	.05901	.01476	0021 3	.00109		
GJ P	130.658	4.233	+6265.	. 35229	.05364	.03661	.01585	00225	.00137		
0/	130.501	5.283	. 59236	35444.	. 05928	19610.	.01635	00233	11 OO .		
(A O)	130.357	6.213	. 59254	. 52433	.06623	.00976	.01662	- · 005004	₩6100.		
I R	130.219	7.193	.59394	.61100	.07792	0021 6	.01722	00178	.00216		
()	130.047	8.200	. 59434	. 69559	. 0 966 4	. 00206	.01631	00103	.00298		
P/ JU		GRADIENT	00015	75060.	00062	1,120.1	.00159	.00006	.00018		

CA23B
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DATA
SOURCE
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ARC 14-120(CA23B) 747/1 AT1

(RNH005) (08 OCT 75)

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SQ, FT. YHPP = 1399 9000 IN. XC IN. ZHPP = 190 '7500 IN. ZC RUM NO. 51 / 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00 / 5.00 RUM NO. 51 / 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00 / 5.00 ALPHAC		5.000			t 75)		5.000 5.000 .000		CBL .000+3 .0015 .00124		CBL .00046 .00074 .00038
### SEMECE DATA ### SEMECE SATION ### SEMECE DATA ### SEMECE SATION ### SEMECE DATA ### SEMECE SATION ### SEMECE DATA ### SEMECE SATION ### SEMECE DATA ### SEMECE DATA	1A				(08 OCT	∀	<u>z</u>		CYN 00205 00291 00297		CYN 00216 00213 00227
SG.FT. XHRP = 1339-9000 IN. XC IN. ZHRP = 190.7500 IN. XC RUNN NO. 51 / 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00 / 5.00 RUN NO. 51 / 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00 / 5.00 RUN NO. 51 / 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00 / 5.00 RUN NO. 51 / 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00 / 5.00 RUN NO. 51 / 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00 / 5.00 RUN NO. 51 / 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00 / 5.00 RUN NO. 61 / 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00 / 5.00 RUN NO. 61 / 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00 / 5.00 RECTA = -1.887					(RNH008)		0000.				0740 1199 1590 0189
SG.FT. XMRP = 1339.9000 IN. XC IN. YMRP = 190.7500 IN. YC IN. YMRP = 190.7500 IN. YC IN. YMRP = 190.7500 IN. XC IN. SGR = 190.7500 IN. XC IN. SGR = 190.7500 IN. XC IN. SCR = 190.7500 IN. XC IN. ZMRP = 1339.9000 IN. XC IN. ZMRP = 1339.9000 IN. XC IN. ZMRP = 1339.9000 IN. XC IN. ZMRP = 190.7500 IN. XC IN. ZMRP = 190.75	PAR		5.00	CYN - 00349 - 00351 - 00351 - 00351 - 00351 - 00286 - 00286 - 00286 - 00286 - 00286 - 00286 - 00286 - 00286		PAR	# 11 # 11 <u>64</u>	5.00		-	701 544 057
SQ.FT. XMRP = 1339.9000 IN. XC IN. YMRP = 190.7500 IN. YC IN. ZMRP = 190.7500 IN. ZC IN. SMRP = 190.7500 IN. ZC IN. SMRP = 190.7500 IN. ZC IN. SMRP = 190.7500 IN. XC IN. YMRP = 1339.9000 IN. XC IN. YMRP = 1339.9000 IN. XC IN. ZMRP = 1339.9000 IN. XC IN. YMRP = 1339.9000 IN. XC IN. ZMRP = 190.7500 IN. ZC IN. ZMRP = 19				. 000475 . 00681 . 01268 . 01271 . 01271 . 01330 . 01496 . 01496 . 01580 . 01580 . 01582	R DATA)		99 - PUC	ŗ	1	ιŲ	+351 +605 5166
SQ.FT. XMRP = 1339.9000 IN. XC IN. YMRP = 190.7500 IN. YC IN. ZMRP = 190.7500 IN. ZC IN. SMRP = 190.7500 IN. ZC IN. SMRP = 190.7500 IN. ZC IN. SMRP = 190.7500 IN. XC IN. YMRP = 1339.9000 IN. XC IN. YMRP = 1339.9000 IN. XC IN. ZMRP = 1339.9000 IN. XC IN. YMRP = 1339.9000 IN. XC IN. ZMRP = 190.7500 IN. ZC IN. ZMRP = 19				CLM0566005660123655188718750240762801928019280193072030720313353076307	251 CARRIE					IT INTERVAL	3659 7533 3191 8222
SG.FT. XMRP = 1339.9000 IN. XC IN. ZMRP = 190.7500 IN. YC IN. ZMRP = 190.7500 IN. YC IN. ZMRP = 190.7500 IN. ZC S. 190 S. 190 S. 190 S. 190 S. 190 S. 190 S. 191 S. 190 S.				.07099 .05678 .05639 .04663 .04511 .04541 .04512 .05205 .05205 .05205 .05205 .0534 .07934 .07934	AT1				•	GRADIEN	4829 2784 9519 3097
SG.FT. XMRP = 13 IN. YMRP = 13 IN. ZMRP = 13		~	Ħ	CL 41372 29293 21752 11834 06273 06273 25470 34288 42312 51421 				# 63		m W	21 76 0073 8161 1067
SG.FT. XMRP IN. ZMRP IN. ZMRP IN. ZMRP SG. T. WRRP SG. T. SMRP SG. FT. XMRP S		39.9000 .0000 90.7500	0 /	MACH 59186 59183 59185 59142 59255 5926 5926 5926 59133 59136 59136 59077	ARC 14-12		14,	0	A0 28 668 70 70	0	A0 552 30 377
SO. FT. IN. IN. SO. FT. IN. SO. FT. SO. FT	4		NO.	AL PHAC -5.190 -3.773 -2.866 -1.854 -1.858 -1.95 3.207 3.111 4.111 5.180 6.172 7.226 7.226			N N N	Q	53 6 51 8 37 10	0	26 6. 24 8. 30 10.
	DAT	SZZ	₹			DAT	S	€	2	Æ	4AC 126 378 378 361
5500. 327. 530. 5348. 64.	RE					REF	5500,0000 327,7800 2348.0400		5		ALPHAC 126 1 2.378 5 4.361 GRADIENT
u w n n n n							£41		DZ 4.38 8.95 3.44		02 6.994 7.541 7.335

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CBL .00067 .00075 .00094 .00006 CBL...00030.00105.00128...00128 CBL .00084 .00048 .00096 CBL .00005 .00037 .00085 .00093 .00015 .00093 75 **08** OCT CYN -.00248 -.00225 -.00220 CYN -.00246 -.00231 -.00241 CYN -.00223 -.00221 -.00248 -.00005 CYN -.00226 -.00183 -.00221 CYN -.00207 -.00208 -.00196 STAB ELEVON DX MACH PARAMETRIC DATA (RNH008) CY .00804 .01275 .01453 .00813 .01269 .01602 CY .00772 .01105 .01568 CY .00687 .01204 .01594 CY .00694 .01139 .01452 CLM .20033 .14230 .11139 -.01987 CLM .15837 .10373 .06761 CLM .22348 .16388 .13143 CLM .16214 .10568 .07253 .02044 CLM .17299 .11921 .08575 5.00 5.00 5.00 5.00 5.00 BETA RUDDER 1 -5.00/ -5.00/ -5.00/ -5.00/ -5.00/ CD .04511 .04873 .05493 CD . 04566 . 04862 . 05489 747/1 AT1 02S1 (CARRIER DATA) CD .04521 .04828 .05405 .00199 CD .04506 .04785 .05395 CD .04436 .04687 .05234 GRADIENT INTERVAL GRADIENT INTERVAL GRADIENT INTERVAL GRADIENT INTERVAL GRADIENT INTERVAL CL -.08207 .15088 .29929 .08660 CL -.06960 .14715 .30370 CL -.08484 .13201 .27339 .08290 CL -.12587 .08773 .24069 .08085 cl. -,10356 .10466 .26565 .08202 -,49569 -,33369 -,43565 -,01520 DY -.41648 -.32859 -.42608 -.00008 -.48477 -.48370 -.52900 -,54456 -,44509 -,49766 -,01238 -.54241 -.44705 -.42173 ձ 3.35 3.34 ARC 14-120 (CA23B) .05961 -.20322 -.19609 -.06045 DX -.08155 -.00515 -.21858 DX -.09164 .00094 -.13705 -.00776 1339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC DX -.10545 .02080 -.10713 DX -.16650 .04687 -.06067 RN/L * RN/L = FN/L = ALPHA0 6.09741 8.38191 10.32980 ALPHA0 6.00790 8.42595 10.27840 ALPHA0 6.09616 8.37419 10.26970 ALPHA0 6.14126 8.39154 10.47500 ALPHA0 5.01990 3.28560 3.30680 .94128 86/0 87/0 85/0 0 / 10 **6** 0 0 0 NON NO XMRP YMRP ZMRP RUN NO RUN NO RUN NO SUN NO MACH .59335 .59218 .59202 MACH .59219 .59329 .59219 MACH .59254 .59202 .59069 MACH .59150 .59156 .59173 MACH .59169 .59244 .59008 REFERENCE DATA 50.FT. ALPHAC -.014 2.461 4.492 GRADIENT ALPHAC -.106 2.490 4.334 GRADIENT ALPHAC -, 065 2, 496 4, 342 6RAD; ENT ALPHAC -.028 2.464 4.306 GRADIENT ALPHAC -.141 2.414 4.401 GRADIENT 5500.0000 327.7800 1 227.7800 1 2348.0400 1 DZ 44.873 44.666 45.029 D2 50.039 50.412 50.166 02 14.752 15.063 15.188 02 29.536 29.860 29.902 02 9.751 9.637 9.522 SREF LREF BREF SCALE

ARC 14-120(CA23B) 747/1 ATI 02SI (CARRIER DATA)

(RNH009) (08 OCT 75)

	-1.000 5.000	.600		CBL . 00036 . 00081 . 00051		CBL .00067 .00103 .00081		CBL . 00049 . 00095 . 00082		CBL . 00054 . 00110 . 00122		CBL . 00055 . 00111 . 00096
	STAB # ELEVON # DX	MACH		CYN 00257 00232 00216	,	CYN 00224 00255 00226		CYN 00213 00235 00218		CYN 00224 00262 00279		CYN 00222 0022 00250 00006
		000		CY .00837 .01073 .01342 .01342		CY .00598 .01137 .01400		CY .00559 .01067 .01392		CY .00679 .01248 .01683		CY .0063C .01117 .01605
	BETA # RUDDER # 10RB #	# . \ \ O	0/ 5.00	CLM .28083 .23122 .19858	0/ 5.00	CLM .25910 .21521 .18271 01754	0/ 5.00	CLM .23726 .19003 .15600	00/ 5.00	CLM .19330 .14450 .11135	0/ 5.00	CLM .18072 .12800 .08693
			VAL = -5.00/	CD .04079 .04325 .04794 .00175	/AL = -5.00/	CD .04223 .04388 .04917	/AL = -5.00/	.04315 .04573 .05083 .00168	۳ ب	.04491 .04758 .05347 .00189	/AL = ~5.00/	. 04486 . 04754 . 05490 . 00210
			GRADIENT INTERVAL	CL 13112 .04574 .20057 .08173	GRADIENT INTERVAL	CL -,14129 .05984 .20916 .08046	GRADIENT INTERVAL	CL 13335 .07903 .22164 .08027	GRADIENT INTERVAL	CL 09066 .11534 .26221 .08035	GRADIENT INTERVAL	CL 09977 .11981 .29730 .08489
			3.35 GRAI	0Y -,48266 -,50319 -,54526 -,01535	3.35 GRA	07 -,47456 -,44624 -,55214 -,01611	3.35 GRA	DY 38124 47713 54510 03699	3.35 GRAE	07 52747 43116 56262 00504	3.34 GRAC	DY 57621 44672 47087 .02364
	.9000 IN. XC .0000 IN. YC .7500 IN ZC		RN/L	DX -2.26005 15449 09343	FN/L =	DX 14314 03224 06267	RN/L =	DX 13258 .00278 12014 .00546	RN/L =	DX 14976 09792 14966	RN/L =	0X 04396 06445 18625 02950
	= 1339 = 190		0 /16 .	ALPHAO 8.98241 10.26110 12.33510	. 92/ 0	ALPHAO 8.14574 10.44590 12.29420 195062	. 93/ 0	ALPHAO 8.04677 10.40940 12.32420 .95159	0 /46	ALPHAO 8.10042 10.47820 12.31910	. 95/ 0	ALPHAO 7.89170 10.32970 12.45250 .97370
REFERENCE DATA	FT. XMRP	į	NON NO	MACH .59107 .59100 .59115	RUN NO	MACH .59119 .59200 .59032	PUN NO	MACH . 59246 . 59206 . 59336 . 00018	RUN NO	MACH .59233 .59264 .59102	RUN NO	MACH .59190 .59246 .59147 00008
REFEREN	5500.0000 SQ 327.7800 IN 2348.0400 IN			ALPHAC .274 2.380 4.334 GRADIENT		ALPHAC 015 2.498 4.339 GRADIENT		ALPHAC 101 2.534 4.322 GRADIENT		ALPHAC 027 2.539 4.365 GRADIENT		ALPHAC 192 2.406 4.485 GRADIENT
	SAEF LREF BREF 1 K # 12	<u>ا</u>		02 8.075 7.276 7.800		DZ 9.930 10.158 9.843		02 14.862 14.490 15.108		02 29.926 29.957 29.720		02 44,465 44,798 44,826

u n	15)		-1.000 5.000 .000 .600		CBL . 00008 . 00048 . 00100	1 75 1		2.000 .000 .000 .600		CBL . 00022 . 00027 . 00094		CBL . 00016 . 00068 . 00107		CBL .00006 .00047 .00041
PAGE) (08 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN 00261 00227 00257) (08 OCT	DATA	STAB ELEVON EDX MACH E		CYN 00328 00308 00270		CYN 00284 00296 00256		CYN 00287 00270 00237
	(RNH009)	PARAMETR1C	000. 8.000.		CY .00892 .01230 .01629	(RNH010	PARAME TRIC	000. 8.000.		. 01112 . 01350 . 01505 . 00095		CY .00995 .01426 .01588		CY .01045 .01251 .01464
			BETA E RUDDER # 10RB # DY	.00/ 5.00	CLM .17100 .11750 .08267 01980			BETA # RUDDER # 10RB # 0)	00/ 5.00	CLM 05073 08840 12692 01839	00/ 5.00	CLM 05625 10779 14897 02036	.00/ 5.00	CLM -,08538 -,13719 -,17831 -,02038
	(CARRIER DATA)			L = -5	CD . 04550 . 04846 . 05451 . 00196	(CARRIER DATA)			۳. رئ	CD .04250 .04602 .05313	5.	CD .04284 .04718 .05528	ري . ا	CD . 04395 . 04860 . 05727 . 00287
	AT1 0251 (CA)			GRADIENT INTERVA	CL 07765 .14545 .29897 .03427	AT1 0251 (CA			GRADIENT INTERVAL	CL 04427 .12201 .28203 .07881	RADIENT INTERVAL	CL 07108 .13875 .30214 .08201	GRADIENT INTERVAL	CL 04596 .15875 .32213 .08071
38	1/247			3.35 GRA	07 -,51299 -,48408 -,45860	1/247			3.39 GRA	DY .03761 .14223 .11115	3.38 GR/	07 38643 41237 31935 .01366	3.37 GR/	DY 34488 39669 41872 01637
DATA - CA23B	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	0x 00083 12157 125516	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	0X 12109 02354 05880	RN/L *	DX 15476 02114 09557 17410.	RN/L =	0x 14715 01582 09065 01408
TABULATED SOURCE	ARC		# 1339. # 190.	0. 96/ 0	ALPHA0 8.07496 10.48780 12.38500	ARC		н 1339. н 190.	0 /101 0	ALPHAO B.00852 10.24330 12.22970 1.02022	0. 102/ 0	ALPHA0 7.95112 10.27510 12.35190	0. 103/ 0	ALPH40 7.98002 10.27829 12.36489 12.36489
TABUL		REFERENCE DATA	.FT. XMRP	RUN NO	MACH .59172 .59179 .59307		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	MACH .59549 .59593 .59467	RUN NO	MACH . 59438 . 59797 . 59946	RUN NO	MACH . 59684 . 59644 . 59768 . 00017
1R 76		REFEREN	5500.0000 SQ. 327.7800 IN. 2348.0400 IN.		ALPHAC 078 550 4.393 GRADIENT		REFERE	5500.0000 S0. 327.7800 IN. 2348.0400 IN.		ALPHAC . 132 2.303 4.270 GRADIENT		ALPHAC 206 2 . 335 4 . 346 GRADIENT		ALPHAC 178 2.367 4.381 GRADIENT
DATE 22 MAR			SREF = LREF = BREF = SCALE =		02 50.555 50.407 50.452			SREF * LREF * BREF * SCALE *		02 6.742 7.349 7.463		DZ 10.009 10.088 10.01		02 15.028 14.812 15.043

ن و	1 75)		5.000 5.000 .000		CBL . 00034 . 00033 . 00070 . 00008		CBL . 00024 . 00052 . 00045		CBL . 00043 . 00058 . 00088	75)		-1.000 5.000 .000		CBL .00027 .00065 .00084
PAGE	(08 001	A7A	STAB = ELEVON = DX = MACH =		CYN -,00283 -,00308 -,00288		CYN 00283 00296 00274		CYN 00298 00286 00286) (08 001	DATA	STAB # ELEVON # DX # MACH #		CYN 001 83 00179 00079
	(RNH010)	PARAMETRIC			CY .01041 .01335 .01470		CY .00978 .01319 .01470		. 01025 . 01229 . 01499	(RNHO11	PARAMETRIC			CY .00782 .01255 .01577
			BETA = RUDDER = 10RB = DY	00/ 5.00	CLM 13755 19267 22858 02024	.00/ 5.00	CLM 16267 21833 25078 01952	00/ 5.00	CLM - 16845 - 22520 - 25671 - 01978			BETA ** RUDDER = 10R8 ** DY = 1	0/ 5.00	CLM .18409 .13833 .10136
	(CARRIER DATA)			ı,	CD .04480 .05083 .06049	- 5	CD .04518 .05195 .06258	L = -5.	CD .04532 .05236 .06269	(CARRIER DATA)			/AL = -5.00/	. 04592 . 04760 . 05254 . 05155
	AT1 0251 (CA			GRADIENT INTERVAL	CL 00567 .20061 .36425 .08200	GRADIENT INTERVAL	CL .01647 .22835 .39143	GRADIENT INTERVAL	CL . 01985 . 23712 . 40064 . 08481	AT1 0251 (CA		·	GRADIENT INTERVAL	CL . 09014 . 09506 . 25598 . 08209
CA23B	747/1			3.36 GR/	DY 51265 -,47228 -,46917 -,00986	3.35 GRA	DY -,41856 -,43596 -,48760 -,01485	3.34 GRA	DY 42559 50454 54820 02749	1/247			3.34 GRA	DY 18456 22048 22023 00861
ł	14-120(CA23B)		.9000 IN. XC .0000 IN. YC .7500 IN ZC	RN/L =	0x 10253 08537 12801 00522	FN/L *	DX 1,246 11112 22071 02280	RN/L =	DX 00328 01726 14625 03050	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	08958 08958 06761 08397
TABULATED SOURCE DATA	ARC		1339	0. 104/ 0	ALPHAQ B.00410 10.33170 12.36740	0. 105/ 0	ALPHAO B.01493 10.39430 12.42070 12.42070	. 106/ 0	ALPHAO 8.06252 10.42250 12.40590	ARC		= 1339. = 190.	. 111/ 0	ALPHAO 4.01104 6.13462 8.21639
TABUI		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	MACH . 59714 . 59546 . 59578	RUN NO	MACH . 59615 . 59623 . 59500 00024	RUN NO	MACH . 59354 . 59459 . 59433		REFERENCE DATA	FT. XMRP YMRP ZMRP	RUN NO	MACH .59320 .59295 .59212
MAR 76		REFERE	5500.0000 50 327.7800 11 2348.0400 11		ALPHAC 108 2.360 4.407 GRADIENT		ALPHAC111 2.422 4.429 GRADIENT		ALPHAC 076 2.472 4.415 GRADIENT		REFEREN	5500.0000 5G. 327.7800 IN. 2348.0400 IN.		ALPHAC . 047 2.270 4.264 GRADIENT
DATE 22 N			SREF = LREF = BREF = SCALE =		02 29.734 30.254 29.860		DZ 44.868 45.183 45.129		02 50.418 50.480 50.477			SREF # 1 LREF # 2 SCALE # 2		02 3.151 3.118 3.528

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URCE DATA - CA23B	
TABULATED SOURCE DATA	
AR 76	
ATE 22 MAR 7	

SE 7	CT 75)		1. 000. 000. 000. 000.		CBL . \$7257 . \$6557 . \$5656 . \$2555		CBL . 00019 . 00019 . 00019		CBL 00006 .00122 .00092		.0004a .00101 .00101 .00075		CBL .00030 .00065 .00108
PAGE	30 80)	DATA	STAB = ELEVON = DX = MACH =		CYN 00196 00193 00205 00002		CYN 00209 00212 00213		CYN 00255 00222 00218		CYN 00224 00199 00231 00001		CYN - 00219 - 00211 - 00226 - 00001
	(RNH011)	PARAMETRIC	0000		CY .00806 .01279 .01682		.00878 .01303 .01594 .00180		CY .01007 .01347 .01669		.00816 .01265 .01715		CY .00824 .01344 .01672 .00186
			BETA ** RUDDER ** 10RB ** DY **	0/ 5.00	CLM .18261 .12728 .09110	0/ 5.00	CLM . 18008 . 12534 . 08523	07 5.00	CLM .16826 .11641 .07844	10/ 5.00	CLM .15453 .10008 .06018 02048	00/ 5.00	CLM .14632 .09216 .05220
	(CARRIER DATA)			/AL = -5.00,	CD .04576 .04829 .05313	/AL = -5.0	.04617 .04825 .05430	VAL = -5.0	CD .04651 .04829 .05439	VAL = -5.0	CD . 04588 . 04869 . 05525		CD .04576 .04813 .05547
	0251			GRADIENT INTERVAL	CL 09319 .12091 .26770 .08166	GRADIENT INTERVAL	CL . 08213 . 12287 . 28506 . 08097	GRADIENT INTERVA	CL 07244 .13302 .29121	GRADIENT INTERVAL	CL 06534 .15686 .32304 .08426	GRADIENT INTERVAL	CL 04588 .16815 .34174 .08460
28	3) 747/1 ATI			3.35 GRA	0Y -,12903 -,22900 -,20347 -,01813	3.35 GRA	01 -, 18607 -, 22556 -, 22926 -, 00973	3.35 GRA	. 19547 23114 18094	3.35 GRA	DY -,17462 -,23873 -,21969 -,01050	3.34 GRA	DY 24970 27150 18981
DATA - CA23B	14-120(CA23B		000 IN. XC 000 IN. YC 500 IN ZC	RN/L a	0x 20703 12007 04267	₽N/L =	03556 - 01048 - 03704	RN/L =	0X 12322 01929 17291 00909	RN/L =	0X 12413 14288 12964 00149	RN/L *	0x 06309 22253 10643
TED SOURCE	ARC		1339.9000 2.0000 190.7500	112/0	ALPHA0 4.03841 6.25137 8.17837	113/0	ALPHAD 4.05269 6.23779 8.30710	. 114/0	ALPHAO 4.15214 6.32741 8.34322	. 115/ 0	ALPHAO 4.00406 6.32040 8.35864	. 116/0	ALPHAO 4.02465 6.29147 8.35115
TABULATED		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .59381 .59203 .59299	RUN NO	MACH .59267 .59142 .59138	RUN NO	MACH .59347 .59386 .59566	RUN NO	MACH .59500 .59479 .59391	RUN NO	MACH .59320 .59320 .59252
R 76		REFERENCE DAT	5500.0000 SQ. 327.7800 IN. 2348.0400 IN.		ALPHAC - 170 2.385 4.257 GRADIENT		ALPHAC - 120 - 353 - 4.419 GRADIENT		ALPHAC 041 2.414 4.392 GRADIENT		ALPHAC 177 2.432 2.435 GRADIENT		ALPHAC 134 2.347 4.450 GRADJENT
DATE 22 MAR			SREF " 5 LREF " 5 BREF " 6 SCALE " 6		02 7.547 7.199 7.175		02 9.781 9.781 9.491		02 14.874 14.967 14.923		02 29.907 29.803 29.693		02 44.786 45.057 44.45

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(2/ L		-1.000 5.000 .000 .600		CBL 00008 .00072 .00032		CBL .00005 .00091 .00070		CBL .00022 .00067 .00080	1 75)		ය. 000. 000. 000.		CBL .00004 .00011 .00052
2) (08 OCT	: DATA	STAB = ELEVON = DX MACH =		CYN 00192 00200 00231		CYN 00236 00234 00226		CYN 00233 00234 00217	3) (08 OCT	DATA	STAB E ELEVON E DX E		CYN 00061 00099 00070
(RNH012)	PARAMETRIC	000 000 000 000 000		. 00761 . 01063 . 01554 . 00183		CY .00853 .01210 .01594		CY .00733 .01253 .01601	(RNH013)	PARAMETRIC			.00644 .01099 .01191
		BETA RUDDER I	.00/ 5.00	CLM .24249 .19210 .16229 01883	00/ 2:00	CLM .23069 .17495 .14153	0/ 5.00	CLM .22108 .15346 .13011			BETA = RUDDER = 10RB = DY	0/ 5.00	CLM 08578 13502 16778 01949
(CARRIER DATA)			ii K	CD . 04364 . 04526 . 04996 . 00145	VAL = -5.00/	CD .04431 .04628 .05166	VAL = -5,00/	CD .04457 .04684 .05236	(CARRIER DATA)			VAL = -5.00/	CD . 04450 . 04857 . 05671
AT1 0251 (CA		•	GRADIENT INTERVAL	CL 11855 .07768 .22480	GRADIENT INTERVAL	CL 10314 .09232 .25013 .07901	GRADIENT INTERVAL	ct 1151 .10203 .26451 .08153	AT1 0251 (CA			GRADIENT INTERVAL	CL 03391 .14021 .30316 .08006
1/247 (3.35 GR/	DY 28949 22924 	3.34 GRA	DY 26645 30365 41296 03222	3.34 GRA	. 29121 - 28681 - 32093 - 00606	1/242			3.34 GRA	07 54464 9183 57379 00681
14-120(CA238		9000 IN. XC 0000 IN. YC 7500 IN 2C	RN/L =	DX 06803 05291 08407 00334	FN/L =	DX 20573 04076 07958	RN/L =	0x 19455 .02098 10402	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	0x 01073 05380 06887 01383
ARC		1339.	1. 121/ 3	ALPHAO 5.99659 8.26383 10.27320	. 122/ 0	ALPHAO 6.16280 8.34562 10.37730	. 123/ 0	ALPHAO 6.05873 8.34630 10.42810	ARC		# 1339.	. 131/ 0	AL PHAO 6.06234 8.09604 10.28890 1.00357
	REFERENCE DATA	T. XMRP I. ZMRP	RUN NO	MACH . 59480 . 59631 . 59450	RUN NO	MACH . 59403 . 59281 . 59334 00016	RUN NO	MACH .59296 .59362 .59257		CE DATA	FT. XMRP. YMRP. ZMRP	RUN NO	MACH .59355 .59495 .59342
	REFEREN	5500.0000 SO 327.7800 IN 2348.0400 IN		ALPHAC .038 2.411 4.319 GRADIENT		AL PHAC 026 2 . 399 4 . 448 GRAD I ENT		AL PHAC 156 2.439 4.458 GRADIENT		REFERENCE	5500,0000 SQ 327,7800 IN 2348,0400 IN		AL PHAC . 127 2.255 4.338 GRAD : ENT
		SPEP DREFF SOALE BREFF		02 3.209 3.176 3.398		02 7.586 7.752 7.261		02 10.180 9.988 10.110			SREF # SCALE # SCALE # SCALE		02 3.093 3.006 3.460

On	١ 5٢ ،		5.000 5.000 .000 .600		CBL .00905 .00056 .00075		CBL .00039 .00031 .00044		CBL 00036 .00038 .00043		CBL .00012 .00031 .00078		CBL .00028 .00008 .00091
PAGE	1) (08 OCT	DATA	STAB E ELEVON B DX B MACH B		CYN 00076 00073 00059		CYN 00104 00078 00074		CYN 00136 00100 00093		CYN 00219 00210 00224 00001		CYN 00232 00233 00239
	(RNH013)	PARAMETRIC			. 00651 . 00960 . 01133		.00702 .00933 .01168		CY .00874 .00974 .01215		CY .00984 .01189 .01466		.00903 .01234 .01449
			BETA RUDDER IORB DY	0/ 5.00	CLM -,09614 -,15708 -,18934 -,02083	0/ 5.00	CLM 10655 16939 20064	00/ 5.00	CLM 12821 18839 21945 01985	00/ 5.00	CLM 16667 22062 24914 01865	00/ 5.00	CLM 18139 23497 26404 01840
	(CARRIER DATA)			/AL = -5.00/	CD .04480 .04999 .05878	/AL = -5.00,	CD . 04490 . 05075 . 05935	٠. ار	CD .04557 .05158 .06089		CD . 04599 . 05272 . 06235	. = -5.	CD . 04594 . 05321 . 06370
	0251			GRADIENT INTERVA	CL 04323 .15965 .32276	GRADIENT INTERVAL	CL 04628 .17509 .33177 .08213	GRADIENT INTERVAL	CL 02802 .18451 .35195 .08201	GRADIENT INTERVAL	CL .01384 .21809 .37352 .08078	GRADIENT INTERVAL	CL .02789 .23957 .40090
3 8	3) 747/1 ATI			3.34 GRAI	.07 42273 50229 51025 01992	3.33 GRAI	07 -,45642 -,58665 -,58819	3.35 GRA	07 -,48842 -,50023 -,53208 -,00920	3.35 GRA	0Y -,48303 -,52953 -,48783 -,00187	3.35 GRA	07 55682 55600 55187
DATA - CA238	14-120(CA23B		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	0x 15708 04116 06766	EN/L =	0x 21796 .00486 10588	RN/L =	0x 14580 10008 06533	RN/L =	0x 13999 15102 15100.	RN/L =	0X 03050 .06383 13420 02059
ATED SOURCE	ARC		1339. 190.	. 132/ 0	ALPHAO 6.01524 8.25183 10.29700	. 133/ 0	ALPHAO 5.97668 8.30916 10.31750	. 134/0	ALPHAO 6.02236 8.30132 10.40550	. 135/ 0	ALPHAO 6.12957 8.34504 10.35230	136/0	ALPHAO 6.08505 8.32281 10.41210
TABULATED		E DATA	YMRP ZMRP	RUN NO	MACH .59173 .59269 .59204	RUN NO	MACH .59189 .59154 .59196	RUN NO	MACH .59168 .59073 .59089	RUN NO	MACH .59060 .59017 .59049	ACN NO	MACH . 59048 . 59053 . 59092
a 7.5		REFERENCE	500.000.55 327.7800 IN 348.0400 IN		AL PHAC - 139 2,360 4,367 GRAD ENT		ALPHAC 237 2.407 4.371 GRADIENT		ALPHAC 191 2.411 4.441 6RADIENT		ALPHAC 063 2.435 4.393 GPADIENT		ALPHAC C49 450 - 274 6RAD 1ENT
DATE 22 YAS					02 7.217 7.234 7.262		02 10.116 9.959 9.890		CZ 15.175 14.756 15.038		02 30, 192 29, 830 29, 948		DZ 44,708 44,458 74,657

E 10 .	1 75 J		5.000 5.000 .000		CBL .00047 .00079 .00103			5.000 5.000 10.000		CBL .00029 .00031
PAGE	3) (08 OCT 75	DATA	STAB # ELEVON # DX MACH #		CYN 00234 00235 00245		DATA	STAB # ELEVON # DX MACH #		. 0001 . 0001 . 00014
	(RNH013)	PARAMETRIC DATA	000. 0000. 9		.00928 .01213 .01498	(RNH014)	PARAMETRIC DATA	000. 000. 8.000.		CY .00918 .01106 .00097
	•		BETA # RUDDER # 10RB # DY #	0/ 5.00	CLM 18463 23973 26826			BE14 ** RUDDER ** 10RB ** DY **	0/ 5.00	CLM 13516 16677 01624
	747/1 ATI 02SI (CARRIER DATA)			VAL = -5.00/	.04578 .05304 .06376	RRIER DATA)			VAL = -5.00/	CD . 04792 . 05600 . 00415
	T1 0251 (CA			GRADIENT INTERVAL	CL . 02730 . 24287 . 413909	747/1 ATI 02SI (CARRIER DATA)			GRADIENT INTERVAL	CL . 15300 . 31783 . 08469
38				3.35 GRA	. 50309 - 52458 - 56778 - 15677	•			3.33 GRA	DY 61049 62378 00683
DATA - CA23B	ARC 14-120(CA23B)		000 IN. XC 000 IN. YC 500 IN ZC	RN/L *	. 02680 - 22483 - 15954	ARC 14-120(CA23B)		000 IN. XC 000 IN. YC 500 IN ZC	RN/L =	0.83387 9.90698 9.3756
TABULATED SOURCE	ARC		# 1339.9000 # 0000 # 190.7500	. 137/ 0	ALPHAO 6.08766 8.35052 10.39360	ARC		1339.9000 * .0000 190.7500	RUN NO. 141/ 0	ALPHAO 8.14864 10.18740 1.04754
TABUL		E DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	MACH .59060 .59151 .59112		E DATA	FT. XMRP YMRP ZMRP	RUN NO	MACH . 58874 . 58797 00040
AR 76		REFERENCE DATA	5500.0000 SQ. 327.7800 IN. 2348.0400 IN.		ALPHAC 057 2.433 4.464 GRADIENT		REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.		ALPHAC 2.292 4.239 GRADIENT
DATE 22 MAR 76		•	SREF = :		02 50.164 50.275 50.038			SREF = FLANE SREF = SCALE = SC		02 3.324 3.528

CBL - .00021 .00028

CYN -.00005 .00019

CY .00916 .01117 .00085

CLM -.14767 -.18984 -.01781

CD .04826 .05813 .00417

CL .14170 .33603 .09208

DX 9.83965 9.98195

ALPHAO 8.03902 10.18070

MACH . 59106 . 59023 -. 00035

ALPHAC 1.933 4.300 GRADIENT

02 7.340 7.097

RN/L =

145/ 0

RUN NO.

GRADIENT INTERVAL = -5.00/ 5.00

3.32 GRADIENT INTERVAL = -5.00/ 5.00

RN/L =

143/0

RUN NO.

CBL -.00004 .00035

CYN .00020 .00018 -.00001

CY .00722 .01057

CLM -.15947 -.20446 -.01831

.04901 .05986 .00442

CL . 14810 . 35090 . 08254

. 65521 -.61097 -.01800

DX 9.80002 9.94826 0.06033

ALPHAO 8.07874 10.29950

MACH .58948 .58978 .00012

ALPHAC 1.946 4.403 GRADIENT

02 10.137 9.825

	÷	DATA	STAB ELEVC DX MACH
	(RNHO14)	PARAMETRIC DATA	. 000 . 000 . 000
			BETA * RUDDER * 10RB *
	ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)		
	111 0251		
	747/1		
TABULATED SOURCE DATA - CA23B	14-120(CA23B)		1339.9000 IN. XC .00000 IN. YC 190.7500 IN ZC
SOURCE	ARC		1339.9
LATEC			H H H
TABL		Y A	XMRP YMRP ZMRP
DATE 22 MAR 76		REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.
55			ния в
DATE			SREF 1 LREF 1 BREF 1 SCALE 1

15)		5.000 10.000 .600		CBL . 0002 6 . 00024 00001		CBL .00041 .00075		CBL .00087 .00054 00014		CBL .00048 .00115
1 C 08 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN 00044 00046 00001		CYN 00200 00189		CYN -,00227 -,00213		CYN 00235 00218
(RNH014)	PARAMETRIC (000 000 000 000 000 000 000 000		CY .00912 .01196		CY .01121 .01368 .00103		CY .01045 .01368		.01183 .01395 .00089
	•	BETA REUDDER RIORB RIORB	0/ 5.00	CLM 18046 22623 01901	00.5 /0	CLM 21949 25593 01522	0/ 5.00	CLM 23415 27112 01520	0/ 5.00	CLM 23840 27329 01465
RIER DATA)			'AL = -5.00/	CD . 04983 . 06097 . 00463	AL = -5.00/	CD . 05124 . 06297 . 00490	/AL = -5.00/	CD .05143 .06410 .00521	/AL = -5.00/	CD .05210 .06420 .00508
1 0251 (CARRIER			GRADIENT INTERVAL	CL . 16011 . 36669 . 08581	GRADIENT INTERVAL	CL . 19732 . 39474 . 08243	GRADIENT INTERVAL	CL .20786 .41832 .08653	GRADIENT INTERVAL	. 22266 . 42020 . 08293
747/1 AT1			3.31 GRAD	0Y 56380 67370 04564	3.31 GRAD	DY 54460 67261 05345	3.30 GRAD	0Y 59050 62597 01458	3.30 GRAD	0Y 58366 63135 02002
1RC 14-120(CA23B)		300 IN. XC 300 IN. YC 500 IN ZC	RN/L = 3	9.88695 9.98489 0.9688	RN/L = 3	0x 9.83759 9.90959 03006	RN/L = 3	0x 9.89672 9.89048 00257	RN/L = 3	DX 9.92864 9.93609 .00313
ARC 1		1339.9000 0000 190.7500	1447 0	ALPHA0 8.07216 10.27830	145/0	ALPHA0 B.10933 10.31920	. 146/ 0	ALPHA0 8.09096 10.35500	. 147/ 0	ALPHA0 8.14847 10.35190
	E DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	MACH . 59834 . 58834 . 00000	RUN NO.	MACH , 58824 , 59120 , 00124	RUN NO.	МАСН .59220 .59175 00019	RUN NO.	МАСН . 59016 . 59062 . 00019
	REFERENCE DATA	5500.0000 SQ. 327.7800 IN. 2348.0400 IN.		ALPHAC 1.968 4.376 GRADIENT		ALPHAC 1.997 4.392 GRADIENT		ALPHAC 1.998 4.430 GRADIENT		ALPHAC 2.049 4.431 GRADIENT
		REF = 5		02 14.831 14.775		DZ 30.007 29.873		DZ 44.854 44.891		D2 50.387 50.182

5

PAGE

. 75)		5.000 5.000 10.000		CBL . 00024 . 00015		CBL .00042 .00031		CBL 00028 .00017		CBL . 00091 . 00104 . 00005		CBL . 00056 . 00133		CBL . 00069 . 00081
) (08 OCT	DATA	STAB # ELEVON # DX # MACH #		CYN 00029 00061		CYN 00046 00064 00007		CYN 00083 00076		CYN 00231 00235 00002		CYN 00259 00252		CYN 00279 00260
(RNHO15)	PARAME TRIC	0000. 80000.		CY .00918 .01223		CY .00909 .01171		CY .01022 .01218 .00081		. 00137		. 00122		. 01187 . 01465 . 00118
	_	BETA = RUDDER = 10RB = 0Y	0/ 5.00	CLM 09299 12094 01432	00.5 /0	CLM 09946 14464 01863	00.5 /0	CLM 13141 17663 01871	0/ 5.00	CLM 18761 23009 01738	00/ 5.00	CLM 21452 25323 01602	3/ 5.00	CLM 21964 25720 01592
(CARRIER DATA)			/AL = -5.00/	00 . 04744 . 05498 . 00386	/AL = -5.00/	.04717 .05710 .05710	/AL = -5.00/	CD . 04878 . 05934 . 00437	/AL = -5.00/	CD . 05068 . 06220 . 00471	" Ř	CD . 05133 . 06320 . 00491	'AL = -5.00/	CD . 05132 . 06327 . 00506
02S1			GRADIENT INTERVAL	CL. . 15377 . 31258 . 08137	GRADIENT INTERVAL	CL . 13345 . 33666 . 08379	GRADIENT INTERVAL	CL , 15424 , 35790 , 08425	GRADIENT INTERVAL	CL . 18744 . 38912 . 08251	GRADIENT INTERVAL	CL . 20689 . 40532 . 08215	GRADIENT INTERVAL	CL . 20766 . 40762 . 08475
3) 747/1 ATI			3.30 GRA[DY 64955 65076 00062	3.29 GRAC	.689514 68920 02719	3.29 GRAD	0Y 73897 69922 .01644	3.29 GRAD	DY 59362 66197 02796	3.29 . GRAD	. 70105 69118 69109	3.29 GRAD	DY 71722 65667 .02566
RC 14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	DX 9.87396 9.88592 .00613	RN/L =	0x 9.84214 9.88451 .01747	RN/L =	DX 9.83145 9.90355 .02983	RN/L #	DX 9.85376 9.88809 .01404	RN/L =	0x 9.84286 9.80066 01747	RN/L =	0x 9,95743 9,90189 02354
ARC		= 1339. = 190.	. 151/ 0	ALPHAO 10.27640 12.32930 1.05174	. 152/ 0	ALPHAO 10.12980 12.42930 .94813	. 153/ 0	ALPHAO 10.16290 12.41680 .93236	. 154/ 0	ALPHA0 10.16660 12.45850 .93764	155/ 0	ALPHAO 10.11530 12.43770 .96142	156/ 0	ALPHAO 10.08650 12.34030 .95528
	SE DATA	SG.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	MACH .59012 .58935 00039	RUN NO	масн . 58898 . 58898 00000	RUN NO.	масн . 5883ч . 59019	RUN NO	MACH . 58930 . 59112	RUN NO	MACH ,58992 ,58952 -,00016	RUN NO	MACH . 58875 . 58946 . 00030
	REFERENCE DATA	5500.6000 SQ 327.7800 IN 2348.0400 IN		ALPHAC 2.410 4.362 GRADIENT		ALPHAC 2.043 4.469 GRADIENT		ALPHAC 2.079 4.497 GRADIENT		ALPHAC 2.049 4.493 GRADIENT		ALPHAC 2.044 4.460 GRADIENT		ALPHAC 2.015 4.375 GRAD:ENT
		SREF = CLREF = CREF = C		02 7.261 7.540		02 9.896 10.215		02 14.806 14.750		DZ 30.131 30.087		02 44.833 45.102		02 50.292 50.425

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13	157		5.000 5.000 20.000 600		CBL .00027 .00038		CBL .00030 .00006		CBL . 00025 . 00038 . 00005		CBL .00046 .00001 00021		CBL .00060 .00107 .00019
PAGE	1 08 OCT	DATA	STAB = ELEVON = DX = MACH =		.00002 00030 00017		CYN 00044 00046 00001		CYN 00041 00051 00004		CYN 00087 00098 00005		CYN 00221 00221
	(RNH016)	PARAMETRIC (000.		CY .00808 .01084		.00869 .01153		CY .00794 .01170		. 00896 . 01246 . 00163		CY .01073 .01354 .00115
		•	BETA = RUDDER = 10RB = DY	00.5 /0	CLM 13605 16141 01350	0/ 5.00	CLM 14803 18998 01706	0/ 5.00	CLM -,16075 -,20178 -,01644	.00/ 5.00	CLM 18416 21886 01515	00.2 /00.	CLM 21782 25344 01462
	RIER DATA)			/AL # -5.00/	CD . 04837 . 05697 . 00458	/AL = -5.00/	CD . 04871 . 05976 . 00449	VAL = -5.00/	CD . 04952 . 06078	ř.	CD . 05096 . 06109 . 00472	ı. Ç	CD . 05169 . 06342 . 00482
	747/1 AT1 02S1 (CARRIER			GRADIENT INTERVAL	CL. . 18952 . 34375 . 08212	GRADIENT INTERVAL	CL .16464 .36794 .08269	GRADIENT INTERVAL	CL .16379 .37344 .08400	GRADIENT INTERVAL	CL 19297 37005 98242	GRADIENT INTERVAL	CL 20292 .40436 .08269
8				3.29 GRAE	DY 85192 -,73584 .06180	3.28 GRA(DY 81205 80660 .00222	3.31 GRA	DY 76563 81234	3.30 GRA	DY 82928 74015 .04148	3.31 GRA	07 80714 86086 02205
DATA - CA23B	C 14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	0X 19.88670 19.94590 53152	RN/L =	0X 19.88560 19.98690	RN/L =	0X 19.81960 20.00000 20.07228	RN/L =	DX 19.89530 20.01710 .05669	RN/L =	0X 19.88350 19.95900 .03099
TABULATED SOURCE DATA	ARC		1339.	. 161/0	ALPHAO B.27632 10.26730 1.06004	. 162/ 0	ALPHAO 8.10145 10.35010	. 163/ 0	AL PHAO 8.13025 10.34260	0. 164/ 0	ALPHAO 8.26269 10.20050	0 /991 0	AL PHAO 8. 1 1890 10. 34740
TABUL		E DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	MACH . 58993 . 59018 . 00013	RUN NO.	MACH . 58931 . 58955	RUN NO.	MACH . 59022 . 58900 00049	RUN NO.	MACH .58950 .58971	RUN NO.	MACH .59006 .59030
3 75		REFERENCE DATA	5500.0000 SQ.f 327.7800 IN. 2348.0400 IN. .0125		ALPHAC 2.461 4.340 GRADIENT		ALPHAC 2.024 4.482 GRADIENT		ALPHAC 1.989 4.485 GRADIENT		ALPHAC 2.147 4.296 GRADIENT		ALPHAC 2.006 4.442 GRADIENT
DATE 22 MAR 76				Va	02 2.997 3.241		02 7.114 7.110		02 10.110 9.502		02 14.885 14.669		02 29.970 29.738
				e C	PAGE	j.							

CBL .00066 .00094 .00011

CYN -.00250 -.00251

CY .01120 .01472 .00145

CLM -.23351 -.26762 -.01398

CD . 05215 . 06437 . 00501

CL .21887 .42343 .08387

DY -.75225 -.77199 -.00810

0X 19.87420 19.88250 .00340

AL PHAO 8, 08105 10, 34770 . 92540

MACH .58963 .58976 .00005

ALPHAC 2.001 4.440 GRADIENT

02 44.740 44.620

GRADIENT INTERVAL = -5.00/ 5.00

3.30

RUN NO. 156/ 0

					.0.7.10											m
3E 14	0CT 75)		5.000 5.000 20.000		CBL .00085 .00118	0CT 75)		5.000 5.000 20.000		CBL .00010 .00038		CBL .00041 .00008		CBL 00001 .00049		CBL .00098 .00079
PAGE	80) (DATA	STAB = ELEVON = DX #ACH #		CYN 00247 00255	80) (DATA	STAB = ELEVON = DX = MACH =		CYN 00113 00132 00009		CYN 00137 00131		CYN 00168 00144		CYN 00275 00292
	(RNH016	PARAME TRIC	000. 000. 6.000.		CY .01084 .01497 .00165	(RNH017	PARAME TRIC	000. 000. 8		CY .01036 .01458		CY .01056 .01336		CY .01135 .01312		CY .01164 .01623 .00191
			BETA RUDDER TORB CONTRACTORS	.00/ 5.00	CLM 23622 27124 01404			BETA RUDDER RUDDER RUDDER B	0/ 5.00	CLM 09480 11771 01097	0/ 5.00	CLM 10108 13814 01559	0/ 5.00	CLM 13116 16875 01601	0/ 5.00	CLM 18554 22418 01608
	(CARRIER DATA)			* 5	.05171 .05171 .06495	(CARRIER DATA)			/AL = -5.00/	CD . 04618 . 05435 . 00391	/AL = -5.00,	CD . 04622 . 05554 . 00392	/AL = -5.00.	CD . 04752 . 05752 . 00421	/AL = -5.00/	CD .08936 .06071
	0251			GRADIENT INTERVAL	CL .21505 .43139 .08669	AT1 0251 (CAP			GRADIENT INTERVAL	CL .16107 .33647 .08399	GRADIENT INTERVAL	CL .14505 .33979 .08190	GRADIENT INTERVAL	CL .15711 .35369 .08373	GRADIENT INTERVAL	CL .18256 .38748 .08529
38	B) 747/1 AT1			3.30 GRA	DY 80823 77122 .01483	747/1			3.31 GRA	07 73949 88774 07099	3.32 GRA	DY 83323 80872	3.33 GRA	70 83951 82679 5420.	3. 32 GRA[DY 87986 75313 .05275
DATA - CA23B	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	DX 19.98550 19.90790 03110	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L #	DX 19.85050 19.85190	RN/L *	0X 19.86550 19.96400 14.49	RN/L =	DX 19.87800 19.95010	RN/L =	0x 19.85060 19.90240 .02156
ATED SOURCE	ARC		# 1339.	. 167/ 0	ALPHAO B.05786 10.43010 .94658	ARC		1339. 190.	0 /171 .	ALPHAO 10.20990 12.38070 1.03942	. 172/ 0	ALPHAO 10.12200 12.28790 .91088	. 173/ 0	ALPHAO 10.15750 12.31590	. 1747 0	ALPH40 10.12010 12.32620 .91819
TABULATED		CE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	MACH . 58890 . 58886 00002		CE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	MACH .59052 .58988 00031	RUN NO	MACH . 59146 . 59089 00024	RUN NO	MACH .59126 .59227 .00043	RUN NO	MACH .59111 .59085 00011
AR 76		REFERENCE	5500.0000 SQ 327.7800 IN 2348.0400 IN		ALPHAC 1.983 4.478 GRADIENT		REFERENCE	5500.0000 SQ 327.7800 IN 2348.0400 IN		ALPHAC 2.320 4.409 GRADIENT		ALPHAC 1.989 4.357 GRADIENT		ALPHAC 2.042 4.390 GRADIENT		ALPHAC 1.994 4.397 GRADIENT
DATE 22 MAR			SREF = 5 LREF = 8 BREF = 2 SCALE =		DZ 50.218 50.509			SREF = 5 LREF = 2 BREF = 2 SCALE = 2		02 7.409 7.682		02 10.200 9.876		DZ 14.980 14.840		DZ 30.168 29.810

15	. 75)		5.000 5.000 20.000 .600		CBL .00031 .00000		CBL . 00084 . 00096 . 00005	1 75 J		5.000 .000 .000 .000		CBL .00603 .00722 .00062		CBL .00524 .00624 .00042		CBL .00494 .00502 .00003
PAGE) (08 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN 00279 00281 00001		CYN 00293 00270	C 08 OCT	DATA	STAB E ELEVON = DX = MACH =		CYN 00742 00687		CYN 00657 00507		CYN 00595 00374 .00089
	(RNH017)	PARAMETRIC	0000.		. 01218 .01549 .01549		CY .01216 .01457	(RNH018	PARAME TRIC	.000 .000 6.000 10.000		CY .00689 .00499 00098		CY .00781 .00549 00098		. 00814 . 00464 00142
			BETA = RUDDER = 10RB = DY	0/ 5.00	CLM 21517 24890 01462	00.5 /0	CLM 21960 25303 01497			BETA = RUDDER = 10RB = 0)	00/ 5.00	CLM 15673 18628 01528	00.5.00	CLM 15966 20341 01847	10/ 5.00	CLM 16891 21466 01852
	(CARRIER DATA)			AL = -5.00	. 05096 . 06250 . 00500	'AL = -5.00,	CD . 05092 . 06205 . 00498	(CARRIER DATA)			*	CD . 04843 . 05666 . 00425	VAL = -5.0	CD .04779 .05797	VAL = -5.0	CD .04837 .05964 .00456
	0251			GRADIENT INTERVAL	CL .21445 0819 .08395	GRADIENI INTERVAL	CL .21247 .40279 .08520	0251			GRADIENT INTERVAL	CL .16901 .32107 .07863	GRADIENT INTERV	CL . 14685 . 33992 . 08149	GRADIENT INTERVAL	CL .15419 .35514 .08136
œ	11 747/1 ATI			3.32 GRAD	DY 82726 77838 .02118	3.32 GRAD	ογ -,87380 -,81367 .02692	9) 747/1 AT1			3.32 GRAC	9.62659 9.59622 01570	3.31 GRAD	07 9.51655 9.62598 .04492	3.31 GRA	27 9.57279 9.48457 03572
DATA - CA23B	14-120(CA23B)		1.9000 IN. XC 1.0000 IN. YC 1.7500 IN ZC	RN/L =	DX 19.84610 19.7777 19.7770	RN/L =	0x 19.95560 19.88730 03057	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	DX -,12064 -,08127	RN/L =	0x -20008 01628	RN/L =	0X 17612 05798
TED SOURCE	ARC		1339.90 2 . 00 190.75	175/0	ALPHAO 10.18690 12.41310	176/0	AL PHAO 10.19050 12.33830 .96146	ARC		1339.9 0. = 190.7	181/0	ALPHAO 8.33671 10.37400 1.05348	182/ 0	ALPH40 8.13160 10.27110	. 183/ 0	AL PHAO 8.10379 10.41380
TABULATED		DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH .59147 .59090 00025	RUN NO.	MACH .59046 .59133 .00039		E DATA	T. XMRP YMRP ZMRP	PUN NO	MACH .59115 .59201 .00045	RUN NO	MACH . 59096 . 58954 00060	RUN NO	MACH . 59142 . 59168 . 00011
MAR 76		REFERENCE DAT	5500.0000 SQ.FT 327.7800 IN. 2348.0400 IN.		ALPHAC 2.109 4.417 GRADIENT		ALPHAC 2.118 4.352 GRADIENT		REFERENCE DATA	5500.0000 SQ.F [.] 327.7800 IN. 2348.0400 IN. .0125		ALPHAC 2.472 4.405 GRADIENT		ALPHAC 2.009 4.378 GRADIENT		ALPHAC 2.005 4.475 GRADIENT
DATE 22 MA			SREF LREF BREF SCALE		72 44.85.24 45.24		02 50.344 50.595			SREF "LREF" BREF "SCALE"		02 3.378 3.590		02 7.711 7.202		02 9.911 10.102

PAGE 16	(RNH018) (08 OCT 75)	PARAMETRIC DATA	.000 STAB = 5.000 .000 ELEVON = 5.000 6.000 DX = .000 10.000 MACH = .600		CY CYN CBL	86000.	CYN CYN CYN . 00032 . 00207	CYN CYN CYN .00032 .00078	CYN CYN .00032 .00207 .00078 .00078 .00028 .00028 .00028	CYN .00032 .00037 .000207 .00078 .00028 .00028	CYN CYN CYN CYN CYN CYN CYN CYN
	(CARRIER DATA)		BETA == RUDDER == 10RB == DY	NTERVAL = -5.00/ 5.00	CD CLM 75 .0497818604 11 .0601522760 +3 .0045901838	-5.00/	5.00/ CD .05099 .06228 .00505	-5.00/ CD .05099 .0528 .00505 -5.00/	CD .05099 .06228 .00505 .00505 .05102 .05102	CD .05099 .0528 .00505 .00505 .05102 .05102 .06273	CD CD .05099 .0528 .00505 = -5.00/ CD .05102 .05311 .05311 .05311
- CA238	0(CA23B) 747/1 ATI 02SI (CARRIER DATA)		4. XC	. = 3.33 GRADIENT INTERVAL	DY CL 3976 9.52500 .17475 3627 9.52553 .36111 330300109 .08243	. = 3.33 GRADIENI INTERVAL	3.33 DY 9.5514 9.5829	3.33 DY 9.58214 9.5829 0.100	3.33 DY 9.5514 9.5829 0.110 3.32 DY 07 9.5128 9.5128	3.33 DY 9.5514 9.5829 3.32 0.140 9.5128 9.4762 1.0156	3.33 DY 9.5514 9.5829 3.32 0.140 3.32 1.0156 3.32 0.6386 9.6386
TABULATED SOURCE DATA	ARC 14-120(CA23B)		1339-9000 IN. 0000 IN. 190-7500 IN.	1847 0 RN/L	ALPHAO DX 8.20%1719876 10.2725005627 .91%86 .06303	185/ 0 RN/L	185/ 0 Ri ALPHAO (8.16409 - 10.25280 -	185/ 0 ALPHAO 8.16409 10.25280 .93464 186/ 0	185/ 0 ALPHAO 8.16409 10.25280 .93464 186/ 0 ALPHAO 8.04435 10.24170 .94063	185/ 0 ALPHAO 8.16409 10.25280 .93464 186/ 0 ALPHAO 8.04435 10.24170 .94063	185/ 0 ALPHAO 8.16409 10.25280 .93464 186/ 0 ALPHAO 8.0435 10.24170 .94063 187/ 0 ALPHAO 8.05519 10.34680
		REFERENCE DATA	5500.0000 SQ.FT. XMRP 327.7800 IN. YMRP 2348.0400 IN. ZMRP .0125	RUN NO.	ALPHAC MACH 2.102 .59109 4.362 .59144 GRADIENT .00016	RUN NO.	RUN NO. ALPHAC MACH 2.100 .59179 4.335 .59187 GRADIENT .00004	RUN NO. MACH .59179 .59187 .00004	RUN NO. 59179 59187 59187 00004 RUN NO. MACH 59095 59177	MACH .59179 .591877 .000004 RUN NO. MACH .59095 .59177 .00035	MACH .59179 .59187 .00004 RUN NO. MACH .59095 .59177 .00035 RUN NO. MACH .59076
DATE 22 MAR 76			SREF = 550 LREF = 32 BREF = 234 SCALE =		02 14.973 14.736		DZ 29.716 29.761 6				

6.2

11	15 1		5.000		CBL .00503 .00708		CBL .00562 .00649		CBL .00542 .00548 .00003		CBL .00218 .00211 00003		CBL .00C64 .00153		CBL .00118 .00131
PAGE) (08 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN 00552 00292		CYN -,00485 -,00202		CYN 00333 00016		CYN . 00151 . 00367		CYN . 00132 . 00192		CYN .00060 .00114 .00023
	(RNH019	PARAMETRIC	000.01		. 00169 00169		CY .00431 .00071 00164		. 00351 00027 00154		00082 00359 00116		CY . 00296 . 00400 . 00044		CY . 00376 . 00557 . 00078
		_	BETA # RUDDER # 10R8 # DY #	00/ 5.00	CLM -,12377 -,15697 -,01681	00/ 5.00	CLM -,12364 -,16629 -,01944	0/ 5.00	CLM 14073 18907 01973	10/ 5.00	CLM 18838 23277 01857	00/ 5.00	CLM 21359 25347 01685	00/ 5.00	CLM 21747 25644 01678
	(CARRIER DATA)			" - Jr	. 04679 . 05461 . 00396	ı,	CD .04639 .05511	/AL = -5.0	CD .04663 .05719 .00431	vAL ≥ -5.0	CD . 04950 . 06132 . 00495	.55.	CD . 05088 . 06213	L = -5.	CD . 05092 . 06241 . 00495
	0251			GRADIENT INTERVAL	CL . 14637 . 30538 . 68051	GRADIENI INTERVAL	CL .13734 .31310 .08012	DIENT INTERVA	CL 13279 33095 .08088	GRADIENT INTERVAL	CL .17439 .37311 .68315	GRADIENT INTERVAL	CL .19987 .39156 .08101	GRADIENT INTERVAL	. 20429 . 39280 . 08119
æ	3) 747/1 ATI			3.32 GRAD	DY 9.49085 9.47890 00605	3.32 GRAD	DY 9.42647 9.43453 0.0367	3.32 GRADI	0Y 9.48663 9.47787 00358	3.32 GRA	DY 9.39762 9.41791 .00849	3.34	DY 9.45087 9.39875 02203	3.34 GRA	DY 9.48992 9.32532 07090
DATA - CA238	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	DX -, 191 <i>22</i> -, 09388 . 04929	RN/L =	0X 13626 04223	RN/L =	DX 15746 07716	RN/L #	DX 19612 14130 02294	RN/L =	0X 16199 23329 03013	RN/L =	DX 10008 12280 00978
ATED SOURCE	ARC		# 1339. # 190.	0 /161 .	ALPHAO 10.30160 12.38840 1.05655	. 192/ 0	ALPHAO 10.17870 12.23590	. 193/ 0	ALPHAO 10.05070 12.36710 .94548	. 194/ 0	AL PHAO 10.12240 12.37380	0 /561 0	AL PHAO 10.0 <i>277</i> 0 12.36580 .98810	0 /96/ 0	AL PHAO 10. 06530 12. 27740 . 95279
TABULATED		E DATA	FT. XMRP YMRP ZMRP	PUN NO	MACH . 59105 . 59167 . 00031	RUN NO	MACH . 59083 . 59198 . 00052	RUN NO	MACH . 59227 . 59154 00030	RUN NO	MACH .59214 .59179	RUN NO	МАСН . 59170 . 59194	RUN NO	мАСН . 591 <i>72</i> . 59165 00003
2 J6		REFERENCE DATA	5500.0000 50.F' 327.7800 IN. 2348.0400 IN.		ALPHAC 2.405 4.380 GRADIENT		ALPHAC 2.116 4.310 GRADIENT		ALPHAC 1.964 4.414 GRADIENT		ALPHAC 2.014 4.404 GRADIENT		ALPHAC 2.014 4.380 GRADIENT		ALPHAC 2.002 4.323 GRAD:ENT
DATE 22 MAR			SREF # 58 LREF # 58 BREF # 23		02 7.491 7.844		02 9.818 9.759		DZ 14.864 15.018		02 30.225 30.105		02 44.421 45.079		02 50.290 50.279

ARC 14-120(CA23B) 747/1 ATI 02SI (CARRIER DATA)

(21 OCT 75)

(RNH020)

18

	5.000 .000 .000 .000		CBL . 00006 . 00034 . 00035		CBL . 00010 . 00002 . 00002		CBL 00020 00005 .00078		CBL 00019 .00023 .00070		CBL 00016 .00046 .00030
DATA	STAB = ELEVON = DX MACH =		CYN 00198 00197 00181		CYN 00202 00191 .00002		CYN 00224 00211 00182		CYN 00204 00199 00173		CYN -,00250 -,00238 -,00220
PARAMETR1C	0000 0000 3		CY .01062 .01235 .01533		CY .01008 .01303 .01547		CY .01132 .01405 .01515		CY .01023 .01286 .01447		. 01109 . 01260 . 01444 . 00072
	BETA * RUDDER = 10R8 = 0Y	0/ 5.00	CLM 20592 2420 25878	0/ 5.00	CLM 20200 25278 27665	0/ 5.00	CLM 20596 25538 28167	0/ 5.00	CLM 21199 25967 28534 01641	00.5 /0	CLM 21290 26400 29104 01698
		/AL = -5.00/	.04772 .05304 .05230 .00346	/AL = -5.00/	CD .04702 .05403 .05327 .00353	/AL = -5.00/	. 04716 . 05436 . 05425 . 00367	AL = -5.00/	CD .04739 .05475 .06510	AL = -5.00/	. 04673 . 05443 . 05571 . 00405
		GRADIENT INTERVAL	CL .01049 .18864 .34994 .6000	GRADIENT INTERVAL	CL 00665 .20981 .36697 .08262	GRADIENT INTERVAL	CL 00033 -21788 .37887 .08243	GRADIENT INTERVAL	CL . C2484 . 29147 . 08147	GRADIENT INTERVAL	CL .02917 .24933 .41677 .08370
		3.32 GRA	23247 -,45838 -,24934 00523	3.32 GRA	0Y -,45749 -,37696 -,36099	3, 32 GRA	DY -,37733 -,30188 -,41242 -,00595	3.31 GRA[DY -,37283 -,40100 -,38851 -,00381	3.30 GRA	07 36988 40752 35652
	9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	0X 04123 02004 10046	£N/L ≈	0X 11584 05714 06747	RN/L =	DX 11365 05987 08454 .00698	RN/L =	0X 06537 07447 05492	RN/L =	DX 10009 11181 11226 00271
	1339.	0 /0 .	ALPHAO 4.00251 5.08127 8.18834	0 /0 .	ALPHA0 3.96105 6.30038 8.19710	0 /0	AL PHAO 4.02219 6.27375 8.32394 .931?4	0 /0	ALPHAO 4.08571 6.34658 8.32952 9.105	0 /0	ALPHAO 4.00738 6.31885 8.40410
CE DATA	. FT. XMRP YMRP ZMRP	RUN NO	MACH .58831 .58905 .58842	RUN NO	MACH .58699 .58730 .58692	PUN NO	MACH . 58793 . 58937 . 59040	RUN NO.	масн . 58772 . 58701 . 58680 00021	RUN NO.	МАСН . 58720 . 58738 . 58798 . 00016
REFERENCE	5500.0000 SQ 327.7800 IN 2348.0400 IN		ALPHAC .056 2.231 4.258 GRADIENT		ALPHAC 232 2.422 4.286 GRADIENT		ALPHAC 190 2.393 4.416 GRADIENT		ALPHAC - 076 2.433 4.425 6RADIENT		ALPHAC 160 2.421 4.475 GRADIENT
	SREF = 5 LREF = 2 BREF = 2 SCALE = 2		02 2.999 3.972 3.376		02 7.356 7.305 7.176		D2 9.998 9.822 9.715		D2 14.608 14.941 14.567		02 29.742 29.812 29.770

6	75)		5.000		CBL .00042 .00038 .00070	. 57		-1.000 .000 .000 .600		CBL .00045 .00059 .00054		CBL .00004 .00078 .00049		CBL .00024 .00114 .00058
PAGE	(21 OCT	DATA	STAB # ELEVON = DX # MACH =		CYN 00266 00250 00242	(08 OCT	DATA	STAB = ELEVON # DX # MACH #		CYN 00135 00158 00156		CYN 00161 00156 00151		CYN 00150 00149 00134
	(RNHO20)	PARAMETRIC D	2 000 · · · · · · · · · · · · · · · · ·		. 01047 . 01292 . 01493 . 00097	(RNH021)	PARAMETRIC D	0000.		CY .00849 .01427 .01723		.00935 .01445 .01661		. 00863 . 01447 . 01604
		u.	BETA ** RUDDER ** 10RB ** DY	00'2'/0	CLM -, £1187 -, 26409 -, 29191 -,01756		_	BETA = RUDDER = 10RB = DY	00/ 5.00	CLM .11822 .08119 .04417	0/ 5.00	CLM .12477 .07301 .03955 01909	00/ 5.00	CLM .12488 .07304 .03731
	(CARRIER DATA)			AL = -5.00/	CD .04615 .05437 .06557	(CARRIER DATA)			۳5.	CD . 04682 . 04879 . 05429	/AL = -5.00,	00 04657 04882 05457 00174	۳. ح	00 04854 04856 05484 00173
	0251			GRADIENT INTERVA	CL . 34208 . 26242 . 43421 . 08540	0251			GRADIENT INTERVAL	CL 26334 . 10532 . 27168 . 38014	GRADIENT INTERVA	CL 08121 .13104 .28617 .08208	GRADIENT INTERVAL	CL 08627 .13476 .29597 .08199
œ	11 747/1 ATI			3.30 GRAC	0Y 36779 37945 47223	3) 747/1 ATI			3.34 GRAD	00992 - 20611 - 21105 - 16472	3.33 GRA[0Y -,18525 -,09697 -,15793	3.33 GRA	07 - 11137 - 24594 - 19440 - 01948
DATA - CA238	14-120(CA238)		9000 IN. YC 0000 IN. YC 7500 IN ZC	RN/L =	03690 . 03690 - 16221 - 08498 - 02887	14-120(CA23B)		9000 IN. XC .0000 IN. YC 7500 IN ZC	RN/L =	05551 .06801 .06491	RN/L =	0X 18828 .15853 01836	RN/L =	0x 15837 .06954 0705-
TED SOURCE	ARC 1		1339.90 100. 100.75	0 / 0	ALPHAO 4.02971 6.37077 8.38738	ARC		1339.90 0. 100.	0 /112 .	A' PHAD 4.13765 6.12604 8.20467	. 212/0	AL PHAO 4.09240 6.25655 8.27549	. 2:3/ 0	0.3747 0.3747 0.3747 0.077 0.077 0.077 0.077 0.077 0.077 0.077
TABULATED		E DATA	FT. XMRP YMRP ZMRP	PCN NO	MACH . 58472 . 58704 . 58677 . 00047		E DATA	FT. XMRP YMRP. ZMRP	RUN NO	. 59032 . 59932 . 58989 . 58919	RUN NO	. 58936 . 59541 . 59012	SN NO	MACH .58982 .59939 .59253
MAR 76		REFERENCE DATA	5500.0000 SQ.F. 327.7800 IN. 2348.0400 IN.		ALPHAC 106 2.474 4.486 GRADIENT		REFERENCE DATA	5500.0000 50.327.7800 IN. 2348.0400 IN.		AL PHAC 173 2.255 4.353 GRADIENT		ALPHAC 126 2.399 4.355 GRADIENT		ALPHAC 253 2.398 4.413 GRAD;ENT
DATE 22 MA			SREF F T		02 44.518 44.662 44.473			SREF = 1 LREF = 1 BREF = 5		02 3.110 3.099		02 7.673 7.105 7.181		02.888 9.888 10.133 9.989

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ب ر ة 20	1 75 1		000.		CB1 CP319 . 00073 . 00118		CBL .00051 .00382 .00141		CBL .00080 .00070 .00127	T 75 1		000 000 000 000 000		CBL . 00009 . 00046 . 00051
PAGE	1) (08 OCT	DATA	STAB = ELEVON = DX #		CYN - 00146 - 00189 - 00130 - 00130		CYN 00170 00170 00159		CYN 00140 00164 00158 00005	(08 OCT	DATA	STAB # ELEVON # DX # MACH #		CYN 00090 00080 00076
	(RNH021)	PARAMETRIC	0000.		CY . 00896 . 01314 . 01659		CY .00888 .01456 .01656		CY .00772 .01450 .01605	(RNH022	PARAME TRIC	000 000 000 000 000		CY .00834 .01028 .01171
			BETA # RUDDER # 10RB # DY	.00/ 5.00	CLM .11953 .07167 .03621 01872	00/ 2.00	CLM .12016 .06741 .03291	.00/ 5.00	CLM .12212 .06671 .03397 01998	·		BETA RUDDER 10RB BOY	.00/ 5.00	CLM 11142 14954 18197 01683
	(CARRIER DATA)			ř.	CD . 04658 . 04884 . 05490 . 00182	# ਨੂੰ	CD .04561 .04843 .05473	" "	CD .04511 .04819 .05431	(CARRIER DATA)			3	CD . 04460 . 05693 . 05692
	AT1 0251 (CA			GRADIENT INTERVAL	Ct. 05334 . 14633 . 30240 . 07985	GRADIENT INTERVAL	CL 05161 .16654 .32362 .08270	ADIENT INTERVAL	CL 03842 .18601 .32904 .08308	AT1 02S1 (CA			GRADIENT INTERVAL	CL - 02845 14571 - 30951 - 08057
CA238	747/1			3.32 GR	0Y 17204 23071 11922	3.33 GR	DY -,19008 -,25948 -,25259 -,01453	3.33 GR/	DY 25920 27177 15241	11246			3.31 GR/	DY 11696 21394 21015 02258
DATA -	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	. 15706 . 07017 - 10634	£N/L ≠	. 08435 - 08984 - 09113	RN/L =	DX 01984 11469 16824 03368	14-120 (CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	0x 16244 05073 15546 .0024
TABULATED SOURCE	ARC		= 1339. = 190.	J. 214/ D	ALPHAO 4.11715 6.35432 8.36005	0. 215/ 0	ALPHAO 4.01695 6.37588 6.33645). 216/ 0	ALPHAO 4.02468 6.42453 8.26444 .95288	ARC		# 1339. # 190.). 221/ 0	ALPHAO B.11954 10.25950 12.37650 1.01450
TABU		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	MACH .58985 .59025 .59031	RUN NO	MACH .58938 .58988 .58886	RUN NO	MACH .58927 .58928 .58963		VCE DATA	N. YMRP N. ZMRP N. ZMRP	RUN NO	MACH .58751 .58636 .58649 00025
MAR 75		REFERE	5500.0000 S 327.7800 1 2348.0400 1		ALPHAC 052 2.452 4.403 GRADIENT		AL PHAC 137 2.487 4.402 GRADIENT		AL PHAC - 114 2 547 4 315 GRADIENT		REFERENCE	5500.0000 SQ 327.7800 IN 2348.0400 IN		ALPHAC . 180 2.374 4.374 GRAD:ENT
DATE 22 M			SREF # BREF # SCALE #	,	DZ 14.808 14.795 14.946		02 29.743 29.755 747.65		DZ 74, 609 74, 749 74, 744			SREF = LREF = BREF = SCALE =		02 7.175 7.048 7.827

21	15 1		5.000		CBL . 00049 . 00033 . 00054 . 00001		CBL -, 00015 , 00040 , 00041		CBL 00014 .00020 .00047		CBL . 00044		CBL .00021 .00092 .00093
PAGE	(RNH022) (08 OCT	PARAMETRIC DATA	STAB = ELEVON = DX = MACH = MA		CYN - 00125 - 00023 - 00088				CYN 00223 00237 00023		CYN 00235 00234 00236 00000		
			0000.8		.00828 .0112 .01270				.00975 .01261 .01448		.00991 .01282 .01547		CY .00994 .01252 .01577
			BETA = RUDDER = 10RB = 0Y	00/ 2.00	CLM -,11814 -,16828 -,19643	0/ 5.00	CLM 13820 19261 22298 01856	00/ 5.00	CLM 17357 23013 25773 01892	0/ 5.00	CLM 18928 24485 27084 01875	0/ 5.00	CLM 19080 24627 27527
	ARC 14-120(CA23B) 747/1 ATI 0251 (CARRIER DATA)			"	.04477 .05010 .05768 .00287	'AL = -5.00,	. 04527 . 05115 . 06023	AL = -5.	CD . 04584 . 06297 . 06205	/AL = -5.00/	CD .04572 .05313 .06240	-5.0	CD . 04574 . 05290 . 06374 . 00389
m			·	GRADIENT INTERVAL	CL -,03663 -,16424 -,31496 -,37941	GRADIENT INTERVAL	CL 02753 .18549 .34208	GRADIENT INTERV	CL .00288 .22549 .37473	GRADIENT INTERVAL	CL . 32323 . 24631 . 39515 . 08463	GRADIENT INTERVAL	CL . 02403 . 23928 . 40942 . 08438
			-	3.31 GRA	07 19570 15123 17388	3.31 GRAE	0Y 24112 18222 21425 .00669	3.31 GRAD	DY 11844 13268 19792	3.31 GRAE	0Y -,19464 -,22195 -,16737	RN/L = 3.30 GRA(DY 17679 25490 12834 .00863
DATA - CA23B			9000 IN. YC 0000 IN. YC 7500 IN ZC	RN/L =	0X 20800 06785 15342	RN/L ≈ 3	DX 19848 11788 05808	RN/L =	0X 10589 08622 18388 01553	RN/L =	DX 04496 06430 18464 02995		0x 00488 00681 14747 162976
TABULATED SOURCE			= 1339. = 190.	. 222/ 0	ALPHAO B.06837 10.36610 12.32470 .95815	RUN NO. 223/ 0	ALPHAO 8.01212 10.42410 12.40420	. 224/0	ALPHAO 7.98338 10.47220 12.37080	. 225/ 0	ALPHAO B.00014 10.43710 12.28420 .97103	. 226/ 0	ALPHAO B. 01036 10.37780 12.41190 . 96199
TABUL		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	MACH .58707 .58734 .58785		MACH .58685 .58648 .58705	RUN NO	MACH .58892 .58798 .58896	RUN NO	MACH .58819 .58859 .58930	RUN NO	MACH . 58776 . 58928 . 58796
7. Y6			5500.0000 SQ. 327.7800 IN. 2348.0400 IN.		ALPHAC 095 2.462 4.329 GRADIENT		ALPHAC 131 2.479 4.467 GRADIENT		ALPHAC 130 2.540 4.360 GRADIENT		ALPHAC 097 2.520 4.300 GRADIENT		ALPHAC 122 2.456 4.443 GRADIENT
DATE 22 MAR			SREF = 5 LREF = 2 BREF = 2 SCALE = 2		02 10.008 9.794 10.168		02 14.875 15.107 14.650		DZ 29.663 30.014 30.212		DZ 44.608 44.758 44.951		02 50.329 50.199 50.308

PAGE 22	OCT 75)				CBL 00918 .00029 .00041		CBL 00013 .00042 .00047		CBL . 00004 . 00004 . 00048		CBL . 00031 . 00064 . 00064		CBL .00058 .00059 .00066				
à	08	DATA	STAB = ELEVON = DX = MACH =		CYN 00080 00094 00093		CYN 00098 00086 00072		CYN 00105 00088 00069		CYN 00110 00079 00075		CYN -,00212 -,00186 -,00178				
	(RNH023)	PARAMETRIC	.000 .000 6.000		CY .00897 .01061 .01280		CY .00824 .01018 .01178		CY .00822 .01045 .01185		. 00819 . 01005 . 01224 . 00089		CY . 00963 . 01166 . 01406				
		-	BETA # RUDDER # 10RB # DY #	0/ 5.00	CLM 13867 19200 22050 01911	0/ 5.00	CLM - 14920 - 21040 - 24099	0/ 5.00	CLM 16112 21851 24779 01943	0/ 5.00	CLM 17626 23345 25929 01872	07 5.00	CLM 19402 24750 27715				
	(CARRIER DATA)						ور ا	/AL = -5.00/	.04613 .05185 .05000	/AL = -5.00/	CD .04621 .05227 .06170	AL = -5.00/	CD .04640 .05280 .06217 .00346	/AL = -5.00	.04658 .05369 .06305 .00363	/AL = -5.00	CD . 04629 . 05355 . 06423
	747/1 AT1 0251			GRADIENT INTERVAL	CL 02521 .17253 .32445 .38103	GRADIENT INTERVAL	CL 03030 .18257 .34468 .08152	3.31 GRADIENT INTERVAL	CL 01468 .19149 .35595	GRADIENT INTERVAL	CL 00018 .21634 .35548 .08168	GRADIENT INTERVAL	CL .02087 .22651 .39717 .08308				
38				3.31	.31	07 23409 28051 33921 02409	0Y 25234 21173 26838 00257		DY 30779 30356 32484 00354	3.31 GRA	DY 27927 33790 31874	3.3! GRA	07 2544 2 21638 28857 00653				
RCE DATA - CA23B	14-120(CA23B)		1000 IN. XC 1000 IN. YC 500 IN ZC		0x 09825 15849 07571	EN/L =	0x 15115 02879 09076	RN/L =	0x 10027 .04293 03724	RN/L =	0x -,09631 -,0960 -,09613	RN/L =	DX -,13999 -,00939 -,17552 -,00517				
TABULATED SOURCE	ARC		FT. XMRP = 1339. YMRP = 2MRP = 190.	231/0	ALPHAO 5.96832 8.39557 10.26840	ō.	ALPHAO 5.98727 8.31873 10.35950	. 233/ 0	ALPHAO 6.07114 8.36328 10.33770	. 234/ 0	ALPHAD 6.07355 8.40095 10.36750	235/ 0	ALPHAO 6.07234 8.35515 10.39440				
TABUL		E DATA			MACH .58728 .58696 .58679 .00011		MACH .58689 .58783 .58732	RUN NO.	MACH .58710 .58742 .58742	RUN NO.	MACH .58865 .58715 .58701	RUN NO.	MACH . 58751 . 58780 . 58780				
AR 76		REFERENCE DATA	5500.0000 SQ. 327.7800 IN. 2348.0400 IN.		ALPHAC .028 2.478 4.342 GRADIENT		ALPHAC 157 2.438 4.444 GRADIENT		ALPHAC 079 2.449 4.418 GRADIENT		AL PHAC 060 2.510 4.425 GRADIENT		AL PHAC -, 083 2.454 4.441 GRADIENT				
DATE 22 MAR			SREF = LREF = BREF = SCALE = S		02 3.160 3.398 3.235		02 7.044 7.210 7.208		02 9.588 9.981 9.714		DZ 14.480 14.703 14.839		02 29. 767 29. 743 29. 929				

PAGE 23	3) (08 OCT 75	DATA	STAB = 5.000 ELEVON = .000 DX = .000 MACH = .600		CYN CBL 0023300919 00241 .00088 00225 .00083		CYN CBL 00252 .00043 00240 .00083 00216 .00062 .00008	24) (21 OCT 75	DATA	STAB # -1.000 ELEVON # .000 DX .000 MACH # .600		CYN CBL 00108 .00033 00148 .00018 00129 .00076 00005		CYN CBL 00131 .00003 00133 .00067 00127 .00082
	(RNH023)	PARAMETRIC	6.000 6.000 6.000		.01053 .01243 .01243 .01499		CY .01059 .01262 .01467 .00099	(RNH024)	PARAME TRIC	000.		. 00594 . 01264 . 01564 . 01544		.00757 .00178 .01178 .01579
			BETA # RUDDER # 10RB # DY	00/ 5.00	CLM 20345 25544 28398 01831	.00/ 5.00	CLM 20195 25964 28608 01863			BETA = RUDDER = 10RB = DY	00/ 5.00	CLM .18137 .13445 .09984 01909	00/ 2.00	CLM .17850 .11955 .08537 02064
	(CARRIER DATA)			ارا درا	CD .04640 .05351 .06421		CD . 04599 . 05409 . 06448 . 00398	(CARRIER DATA)			i i	.04472 .04665 .04665 .05139	L = -5.	CD . 045CS . 04718 . 05253 . 00161
	AT1 0251 (CA			GRADIENT INTERVAL	CL .33719 .24488 .41381	GRADIENT INTERVAL	CL .02722 .25555 .41604 .085157	AT1 0251 (C/			GRADIENT INTERVAL	CL - 10177 . 09081 . 24911 . 08208	GRADIENT INTERVA	CL 10083 .10612 .26581 .08079
38	747/1			3.31 GR/	0Y 30457 27163 27768	3.31 GR	0Y 38741 35672 34245	1/247			3.30 GR	07 03671 03732 00360	3.30 GR	DY 13415 07016 00760 02775
E DATA - CA23B	14-120(CA23B)		.9000 IN. XC .0000 IN. YC .7500 IN ZC	RN/L =	0x .01963 12451 16344	RN/L =	0x .07546 .16393 -17706 -20575	: 14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	0. 15532 05770 08859	RN/L ≈	0x 15883 04069 07466
ATED SOURCE	ARC		# 1339 = 190	. 236/ 0	AL PHAO 6.08798 8.29718 10.35730	. 237/ 0	ALPHAO 5.98166 8.4!739 10.35530	ARC		= 1339. = 190.	0. 241/0	AL PHAO 5.92147 8.27250 10.30860	J. 242/ D	AL PHAD 6.05472 8.32441 10.35700 94519
TABULATED		CE DATA	FT. XMRP. YMRP. ZMRP	PCN NO	MACH .58642 .58834 .58776	RUN NO	MACH . 58726 . 58814 . 58821		REFERENCE DATA	50.FT. XMRP 1N. YMRP IN. ZMRP	RUN	MACH .58652 .58700 .58753	PUN NO	MACH .58739 .58740 .58743
MAR 76		REFERENCE	5500,0000 SQ 327,7800 IN 2348,0400 IN		AL PHAC 030 2.408 4.398 6RAD1ENT		ALPHAC 140 2.539 4.426 GRADIENT		REFEREN	5500.0000 SO 327.7800 IN 2348.0400 IN		ALPHAC 104 2.378 4.382 6PADIENT		ALPHAC 107 2.445 4.433 GRADIENI
DATE 22 M			SREF = LREF = BREF = SCALE =		D2 44.538 44.541 44.965		02 49.951 49.950 50.050			SREF = LREF = BREF = SCALE =		02 2.790 3.147 3.235		02 7.214 7.169 7.223

TABULATED SOURCE DATA - CA238

	1 75)		000.1-		CBL .00047 .00083 .00098		CBL .00082 .00082 .00082		CBL .00005 .00086 .00093		CBL .00041 .00054 .00111		CBL . 00010 . 00047 . 00098
ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA) (RNH024) (21 OC		DATA	STAB # ELEVON # DX # MACH #		CYN 00100 00119 00111	CYN CYN .0063600100 .0120000119 .0145400111 .0018800003	CYN 00116 00097 00110		CYN 00147 00152 00170		CYN 00161 00189 00197		CYN 00175 00193 00183
	SNHOW.	PARAMETRIC	.000 .000 .000 .000		CY .00636 .01200 .01454		. 00644 . 01127 . 01484 . 00188		CY .00766 .01278 .01594		CY .00776 .01432 .01680		CY . 00856 . 01444 . 01610
			BETA : RUDDER : 10RB : DY	.00/ 5.00	CLM .16852 .11195 .07969	0/ 5.00	CLM .16151 .10173 .07118	0/ 5.00	CLM .14155 .09113 .05330 01949	00.5 /0	CLM .13885 .08478 .04644 02024	7 5.00	CLM .13586 .08023 .04657 01995
				ا در	CD .04510 .04735 .05252	/AL = -5.00/	. 04520 . 04765 . 05293 . 00167	/AL = -5.00,	CD .04539 .04770 .05433	/AL = -5.00/	. 04491 . 04753 . 05407 . 00197	AL = -5.00/	CD .04501 .04786 .05397 .00193
				GRADIENT INTERVAL	CL 08434 .11696 .26424 .07947	GRADIENT INTERVAL	CL 08892 .13198 .27390 .08165	3.29 GRADIENT INTERVAL	CL 05359 .14830 .31514 .08129	GRADIENT INTERVAL	CL 05172 .16258 .32967 .08320	GRADIENT INTERVAL	CL 04505 .17791 .33087 .08369
				3.30 GRA	04378 04115 09073	3.30 GRA	DY 00497 02456 .04104 .0897		DY 04473 01269 06341 00354	. 246/ D RN/L = 3.28	DY 05457 09489 18341	3.28 GRAE	07 02120 03470 10654 01806
	ון ובסוכשני		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	DX 18639 .00386 10428	FN/L *	DX 12109 .06072 02626	RN/L =	DX 10332 03171 14258 00737		0X .01971 16445 16873 04237	. 247/ 0 RN/L =	0% . 05285 20397 10617 03952
JAA	į		# 1339. # 190.	. 243/ 0	ALPHAO 6.13824 8.36642 10.29090	10.69.01 1943 1943 19442	ALPHAO 6.00907 8.38433 10.19090	. 245/ 0	ALPHAO 6.07204 8.35352 10.42190		ALPHAO 5.98327 8.30857 10.42130		ALPHAO 6.01605 8.42955 10.32850
		CE DATA	.FT. XMRP . YMRP . ZMRP	RUN NO	.58773 .58745 .58776 .00000	МАСН . 58789 . 58804 . 58739 00010	RUN NO	MACH .58755 .58755 .58751 00001	RUN NO	MACH . 58586 . 58578 . 58714	RUN NO	MACH .58611 .58686 .58763	
		REFERENCE DAT	5500.0000 SQ 327.7800 IN 2348.0400 IN		ALPHAC 036 2.466 4.354 GRADIENT		ALPHAC 163 2.499 4.287 GRADIENT		ALPHAC -, 049 2,432 4,487 GRADIENI		ALPHAC 131 2 .390 4 .445 GRADIENT		ALPHAC 101 2.534 4.394 GRADIENT
			SREF LREF BREF SCALE = 5		02 9.900 9.833 9.797		02 14.827 14.725 14.404		02 29.598 29.897 29.731		DZ 44.528 44.796 44.981		02 49,996 50.084 50.059

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E 26	1 75 1		0000.		CBL .00051 .00132 .00116	T 75)		5.000 .000 .000 .600		CBL .00040 00002 .00098		CBL 000090 .00078		CBL 00020 .00041 .00072
PAGE	5) (21 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN 00144 00166 00202 00012	7) (08 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN 00105 00116 00094 .00095		CYN 00126 00099 00094		CYN 00156 00156 00146
	(RNH025)	PARAMETRIC	000 000 8		CY .00590 .01240 .01670	(RNH027)	PARAMETRIC			00698 01072 01089		.00815 .00936 .01213		CY .00904 .01024 .01366
			BETA = RUDDER = 10RB *	00/ 5.00	CLM .15222 .09627 .06192			BETA = RUDDER = 10RB = DY	0/ 5.00	CLM 09928 1415 17512	0/ 5.00	CLM 10462 15931 18979 01882	0/ 5.00	CLM 12749 18452 21549 01938
	(CARRIER DATA)			"	CD . 04425 . 04678 . 05282 . 00181	(CARRIER DATA)			VAL # -5.00,	CD .04409 .04904 .05657	VAL = -5.00	.04447 .04981 .05794 .00291	/AL = -5.00	CD .04498 .05111 .05013
	AT1 0251 (CA		·	GRADIENT INTERVAL	. 07201 07201 15894 30917 08355	AT1 0351 (CA)			GRADIENT INTERVAL	CL 03529 15226 .31003	GRADIENT INTERVAL	CL 04409 .16781 .32133 .08028	GRADIENT INTERVAL	CL 02627 .18739 .34830
38	747/1			3.32 GRA	DY 05236 .03018 .07273	747/1			3.28 GRA	DY . 07740 . 09110 . 04415 00757	3.28 GRA	07 .03987 .06373	3.27 GRA	07 . 05635 . 03567 . 04642 00242
: DATA - CA23B	14-120(CA23B)		.9000 IN. XC .0000 IN. YC .7500 IN ZC	RN/L =	DX .02097 09531 20688 04939	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	DX 10996 10062 14232 00740	RN/L .	DX 17277 05317 08957	RN/L =	DX 19035 08235 16821 . 00653
TABULATED SOURCE	ARC		1339	0 /0	ALPHAO 7.83733 10.43110 12.37400 .99048	ARC		1339.	. 261/ 0	ALPHAO 8.02000 10.17530 12.29900 1.00780	. 262/ 0	ALPHAO 7.97637 10.34850 12.31440 .95000	. 263/ 0	ALPHAO 8.01648 10.39360 12.50860
TABUL		REFERENCE DATA	L.F.T. XMRP	RUN NO	MACH . 58747 . 58807 . 58684 00011		REFERENCE DATA	FT. XMRP. YMRP. ZMRP	RUN NO	MACH .58593 .58706 .58635	RUN NO	MACH .58650 .58620 .58597	RUN NO	MACH .58646 .58598 .58597 00009
MAR 76		REFEREN	5500.0500 SQ 327.7833 IN 23+8.0400 IN		ALPHAC 233 2 . 449 4. 339 GRADIENT		REFEREN	5500.0000 SQ.FT 327.7800 IN. 2348.0400 IN. .0125		ALPHAC .046 2.283 4.288 GRADIENT		ALPHAC - 171 2.437 4.384 6RADIENT		ALPHAC 7.143 2.462 4.479 6RAD:ENT
DATE 22 M			SREF LREF BREF SCALE		02 49.823 50.763			SREF = CREF = CSCALE		02 7.310 7.309 7.865		02 9.835 9.901 9.652		DZ : 4.936 14.990 15.447

7.3	. 75		5.000 .000 .000 .000		CBL 00001 .00065 .00069		CBL 0000B .00094 .00093		CBL .00012 .00059 .00069	f 75)		5.000 .000 10.000		CBL .00028 .00061
PAGE	7) (08 OCT	DATA	STAB ELEVON BOX		CYN 00216 00201 00170		CYN 00267 00277 00227		CYN 00275 00285 00238	B) (08 OCT	DATA	STAB: * ELEVON = DX =		CYN 00172 00151
	(RNH027)	PARAMETR1C	8.000 .000 .000		. 00993 . 01176 . 01377 . 00083		. 01090 . 01335 . 01420 . 00075		CY .01027 .01361 .01463	(RNH028)	PARAMETRIC	000		CY .01162 .01322
			BETA = RUDDER = 10R8 = DY	00/ 5.00	CLM -,16413 -,25170 -,25042 -,01916	0/ 5.00	CLM 18314 23879 26591 01861	00/ 5.00	CLM 18067 24068 27014 01978			BETA # RUDDER # 10RB # DY	00/5 /00	CLM 18476 21504 01498
	(CARRIER DATA)			" \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	CD .04518 .05230 .06192	VAL = -5.00	CD . 04545 . 05270 . 06244	ii R	.04467 .05232 .06330	(CARRIER DATA)				.05086 .05019 .00462
	0351			GRADIENT INTERVAL	CL .00060 .21999 .37478	GRADIENT INTERVAL	CL .02800 .24526 .39876	GRADIENT INTERVAL	CL .01278 .23699 .41124	AT1 0351 CCA			GRADIENT INTERVAL	CL . 18345 . 35199 . 08337
gg.	3) 747/1 AT1			3.27 GRAE	57 .03516 .05502 .01473	3.27 GRA[07 .00438 .06035 02875 00540	3.28 GRA	07 .04605 .05734 .07898	747/1			3.28 GRA	00383. . 14029 . 06751
DATA - CA23B	14-120(CA23B)		9000 IN. XC .0000 IN. YC .7500 IN ZC	RN/L =	DX 14677 10279 13616 00334	FN/L =	08756 09962 18554 02062	RN/L =	0x .06098 13316 16478 05071	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	9.88371 9.89607 0.00611
SOURCE	ARC		1339	. 264/ 0	ALPHA0 7.95935 10.44460 12.37600 .96822	. 265/ 0	ALPHA0 7.98864 10.45630 12.35100	. 266/ 0	ALPHA0 7.98867 10.34730 12.39550 .96322	ARC		1339	0 /182 0	ALPHA0 8.29095 10.38510 1.03598
TABULATED		E DATA	FT. XMRP YMRP ZMRP	RUN NO	MACH .58652 .58531 .58590 00016	RUN NO	MACH .58633 .58607 .58533	RUN NO	MACH .58469 .58577 .58519		CE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	MACH .58657 .58709 .00026
748 76		REFERENCE DATA	5500.0000 SQ. 327.7800 IN. 2348.0400 IN.	•	ALPHAC 161 2.529 4.385 GRADIENT		ALPHAC 113 2.534 4.379 GRADIENT		ALPHAC 137 2 . 437 4 . 427 6RADIENT		PEFE (EA)CE	9500,000 SQ 227,7860 IN 727,7860 IN 727,7860 IN		AL PHAC 2.460 4.481 GRADIENT
DATE 22 M			SREF = BREF = SCALE =		02 29,711 29.841 30.092		DZ 44,673 44,791 44.852		DZ 50.205 50.115 50.313			SREF LREF BREF SCALE		3.140 3.154

88	152		5.000 .000 10.000		CBL .00024 .00031		CBL .00019 .00053		CBL .00007 .00059 .00021		CBL .00075 .00060 00007		CBL .00093 .00126		CBL .00073 .00117 .00018
PAGE	1 C 08 CCT	DATA	STAB * ELEVON = DX		CYN 00147 00118		CYN 00118 00090	-	CYN 00100 00059		CYN 00212 00185		CYN 00263 00245		CYN 00272 00228
	(RNH028)	PARAMETRIC	000. 6.000.		CY .01086 .01285 .00083		CY .00992 .01207		CY .01049 .01089		.01166 .01403 .00102		CY .01239 .01506		CY .01292 .01469
		_	BETA RUDDER TORB DY	00/ 5.00	CLM 19071 23300 01771	0/ 5.00	CLM 20156 24152 01652	0/ 5.00	CLM 21491 25353 01573	0/ 5.00	CLM 23919 27401 01491	٥٠٠٤ /د	CLM 24661 28080 01408	00.5 /0	CLM 24914 28245 01344
	(CARRIER DATA)			#	CD . 04991 . 05078 . 00455	/AL = -5.00/	CD . 05047 . 06172 . 00465	AL = -5.00	CD .05091 .06251	AL = -5.00,	CD . 05182 . 05406 . 00524	'AL = -5.00'	CD . 05151 . 06449 . 00534	/AL = -5.00	CD . 05152 . 06458 . 00527
	0351			GRADIENT INTERVAL	CL . 16054 . 36105 . 08397	GRADIENT INTERVAL	CL . 17325 . 37085 . 08168	GRADIENT INTERVAL	CL . 18196 . 38011 . 08071	GRADIENT INTERVAL	CL 21268 .40789 .08359	GRADIENT INTERVAL	CL .21699 .42038 .08376	GRADIENT INTERVAL	CL . 22147 . 43392 . 08572
38	(B) 747/1 AT1			3.28 GRAE	02441 . 03213 . 0324	3.28 GRAE	DY 00656 .07583 .03405	3.28 GRAE	DY . 07964 . 01744 02534	3.29 GRAC	DY .05921 .06578 .00282	3.29 GRAD	DY 01014 .09425 .04299	3.29 GRAD	07 .05490 .01787 01494
. DATA - CA238	14-120(CA23B		9000 IN. XC 0000 IN. YC 7500 IN 2C	RN/L =	0x 9.89112 10.03350 .05963	RN/L =	DX 9.90835 9.98861 71880.	RN/L =	05.04080 05.04080 05.078	RN/L =	0.85463 9.93482 9.03482	RN/L =	0x 9.89025 9.85318 01527	RN/L =	0x 9.95888 9.91845 01631
ATED SOURCE	ARC		1339. 190.	. 282/ 0	ALPHAO 8.14688 10.23600	. 283/ 0	ALPHAO 8.17312 10.40820 .92385	. 284/ 0	ALPHAO 8.11471 10.33430	. 285/ 0	ALPHAO 8.28611 10.41500	. 286/ 0	ALPHAO 8.18310 10.47830	. 287/ 0	ALPHAO 8.14261 10.46300
TABULATED		E DATA	FT. XMRP YMRP ZMRP	RUN NO	MACH .58775 .58829 .00023	RUN NO	MACH . 58638 . 58659 . 00009	RUN NO	MACH . 58696 . 58697 . 00001	RUN NO	MACH . 58699 . 58714 . 00006	RUN NO	MACH . 58656 . 58637 00008	RUN NO	MACH . 58636 . 58679 . 00018
NR 76		REFERENCE DAT	5500.0000 SQ.F. 327.7800 IN. 2348.0400 IN.		ALPHAC 2.022 4.410 GRADIENT		ALPHAC 2.068 4.488 GRADIENT		ALPHAC 2.026 4.481 GRAD1ENT		ALPHAC 2.180 4.515 GRADIENT		ALPHAC 2.093 4.521 GRADIENT		ALPHAC 2.061 4.539 GRADIENT
DATE 22 MAR			SAEF = 5 LREF = 5 SCALE = 2		02 7.424 7.204		02 9.851 9.970		02 14.671 14.337		02 29.878 29.674		02 44.780 45.100		02 50.200 50.258

29	75)		5.000 .000 .600		CBL .00042 .00043		CBL . 00068 . 00083		CBL .00015 .00063		CBL .00021 .00064 .00018		CBL .00052 .00073		CBL .00096 .00152
PAGE	(08 OCT	DATA	STAB # ELEVON # DX # MACH #		CYN 00143 00137 .00003		CYN 00142 00108		CYN 00094 00073		CYN 00177 00159		CYN -,00261 -,00250		CYN -,00268 -,00220
	(RNH029)	PARAMETRIC D	8 .000 .000 .000		CY .01091 .01379		CY .01039 .01258		CY .00935 .01141		CY .01145 .01349		.01259 .01545 .00121		CY .01233 .01416 .00073
		α.	BETA = RUDDER = 10RB = DY	0/ 5.00	CLM 14367 17046 01355	00/ 2.00	CLM 14754 18727 01635	00.5 /0	CLM 17107 20976 01617	00/ 5.00	CLM 21457 25027 01499	10/ 5.00	CLM 23173 26570 01440	00/ 2.00	CLM 7.23355 7.26991 7.01443
	(CARRIER DATA)			'AL = -5.00,	CD . 04898 . 05752	# -5	CD . 04824 . 05869 . 00430	/AL = -5.00,	CD .04928 .05951 .00427	L = -5.	CD . 05083 . 06250 . 00490	VAL = -5.00/	CD . 05126 . 06297 . 00497	-5.	CD .05073 .06352 .00508
	0351			GRADIENT INTERVAL	CL . 17081 . 33408 . 08256	GRADIENT INTERVAL	CL . 14656 . 34631 . 08221	GRADIENT INTERVAL	CL .15828 .35290 .08135	GRADIENT INTERVA	CL .19833 .39123 .08100	GRADIEN" INTERVAL	CL .20947 .40818 .08423	GRADIENT INTERVAL	CL .20709 .41781 .08362
œ	11 747/1 ATI			3.29 GRAD	07 . 03727 . 03280 00226	3.28 GRA[DY 01357 .06365	3.28 GRA	07 .09566 .05812 01569	3.29 GRA	DY .05260 .04924 .00141	3.28 GRA	07 .06428 .13076 .02818	3.28 GRA	DY . 05093 . 07529 . 00967
DATA - CA23B	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L = 3	0X 9.93909 9.89734 02111	RN/L =	0X 9.84159 9.91158 0.02881	RN/L =	03 9.83260 9.91415 03409	RN/L =	0x 9.79538 9.85045	RN/L =	DX 9.88695 9.82664 02556	RN/L =	03,99054 9,99054 9,89004 -,03988
TABULATED SOURCE	ARC		1339.90 10. 190.75	. 291/ 0	ALPHAO 10.34390 12.41160 1.04555	. 292/ 0	AL PHAO 10.16860 12.43630	. 293/ 0	AL PHAO 10.13820 12.34200 .92115	. 294/ 0	ALPHAO 10.25250 12.45730	. 295/ 0	AL PHAO 10.13000 12.41470	0 /962 0	AL PHAO 10.07900 12.54340 .97795
TABULA		E DATA	FT. XMRP YMRP ZMRP	RUN NO	MACH . 58846 . 58807 00020	RUN NO	MACH . 58779 . 58837 . 00024	RUN NO.	MACH . 58818 . 58829 . 00005	RUN NO	MACH .58847 .58839	RUN NO	MACH .58898 .58942	RUN NO	MACH .58684 .58697 .00005
7 76		REFERENCE DATA	5500.0000 SQ.R 327.7800 IN. 2348.0400 IN.		ALPHAC 2.465 4.442 GRADIENT		ALPHAC 2.057 4.486 GRADIENT		ALPHAC 2.020 4.412 GRADIENT		ALPHAC 2.128 4.510 GRADIENT		ALPHAC 2.087 4.446 GRADIENT		ALPHAC 2.027 4.547 GRAD:ENT
DATE 22 MAR 76			SREF = 5F LREF = 5F BREF = 2		02 7.274 7.616		02 10.037 10.105		DZ 15.073 14.864		02 30.231 29.953		02 44.559 45.001		DZ 50.108 50.709

TABULATED SOURCE DATA - CA23B

CE DATA - CA23B PAGE 30	C 14-120(CA23B) 747/1 ATI 03SI (CARRIER DATA) (RNH03D) (08 OCT 75)	PARAMETRIC DATA	9000 IN. XC BETA = .000 STAB = 5.000 .0000 IN. YC .000 IORB = 8.000 DX = .20.000 DY = .000 HACH = .600	RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00	DX DY CL CD CLM CYN CBL 19.88150 .03398 .18056 .0486514392 .0113700164 .00098 19.89100 .03796 .33711 .0566316495 .0135400151 .00113 .00505 .00206 .08322 .0042401118 .00116 .00007 .00008	RN/L = 3.28 GRADIEN" INTERVAL = -5.00/ 5.00	DX DY CL CD CLH CY CYN CBL 19.84880 .04975 .15720 .04799 14904 .01073 00150 .00071 19.90010 .02053 .35641 .05833 18466 .01313 00131 .00085 .02074 01181 .08052 .00418 01440 .00097 .00008 .00006	RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00	DX DY CL CD CLM CY CYN CBL 19.84270 .03141 .17727 .04915 17486 .01029 00125 .00048 19.92050 .02009 .36229 .05939 20755 .01249 00104 .00095 .03430 00499 .00451 01441 .00097 .00009 .00020	RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00	DX DY CL CD CLM CY CYN CBL 19.88270 .04308 .38238 .0492021110 .0102400183 .00063 19.93250 .09516 .40260 .0623124934 .0137200169 .00146 .01904 .01991 .08421 .0050101462 .00133 .00006 .00032	RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00	DX DY CL CD CLM CY CYN CBL 19.86300 .06580 .21673 .0511423234 .0121300259 .00053 19.85900 .09727 .39819 .0621726376 .0141100233 .0011000171 .00085	RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00	DX DY CL CD CLM CY CYN CBL 19.9285000602 .21223 .0507723614 .0119700271 .00116
1	C 14-120(CA23B)		9000 0000 NI 0000 NI 0002	= 3.28	DX 19.88150 19.89100	3.28	01.09.94 19.90010 19.050.	3.28	0X	3.28	0x 19.88270 19.93250 10.9010	3.29	DX 19.86300 19.85900 00171	= 3.30	DX 19.92850
	ARC	REFERENCE DATA	5500.0000 SQ.FT. XMRP = 1339. 327.7800 IN. YMRP = 190. 2348.0400 IN. ZMRP = 190.	RUN NO. 301/ 0	ALPHAC MACH ALPHAO 2.474 .58572 10.34670 4.355 .58623 12.31920 GRADIENT .00027 1.04919	RUN NO. 302/ 0	ALPHAC MACH ALPHAO 2.021 .58701 10.13010 4.495 .58644 12.43730 GRADIENT00023 .93258	RUN NO. 303/ 0	ALPHAC MACH ALPHAO 2.172 .58581 10.26770 4.441 .58686 12.34570 GRADIENT .00046 .91607	RUN NO. 304/ D	ALPHAC MACH ALPHAO 1.934 .58823 10.05950 4.549 .58519 12.46690 GRADIENT00116 .92058	RUN NO. 305/ 0	ALPHAC MACH ALPHAO 2.080 .58767 10.16970 4.413 .58708 12.35030 GRADIENT00026 .93477	RUN NO. 306/ 0	ALPHAC MACH ALPHAO 2.067 .58729 10.15600
DATE 22			SPEF LREF BREF SCALE		02 7.146 7.541		02 10.020 10.077		02 14.887 14.608		02 30.123 29.781		DZ 44.889 44.724		50.425

31	1 57		5.000 .000 .000.000 .600		CBL .00080 .00049		CBL .00053 .00014		CBL .00119 .00046 0C028		CBL .00062 .00097 .00015		CBL .00039 .00102		CBL .00079 .00115
PAGE	(08 OCT	DATA	STAB = ELEVON = C DX = C		CYN 00154 00120 .00018		CYN 00146 00099		CYN -,00117 -,00085		CYN 00235 00172		CYN 00253 00065		CYN 00268 00239
	(RNH031)	PARAMETRIC D	2 000. 3 000. 6 000 0		CY .01070 .01211 .00073		CY .01027 .01243		CY .00993 .01239		.01222 .01224 .00010		CY .01186 .01612		.01270 .01485 .00091
		a.	BETA # RUDDER # 10RB # DY	00/ 2.00	CLM 20251 22966 01404	00.5.00	CLM 20084 24076 01559	00/ 5.00	CLM 21485 25393 01525	00/ 5.00	CLM 23905 27215 01452	00/ 5.00	CLM 24740 28107 01404	.00/ 5.00	CLM 24963 28269 01396
	RIER DATA)			i.	.05068 .05006 .06006	AL = -5.00	CD . 04952 . 06189 . 00483	# .5.	CD .05003 .06279 .00498	# -5	CD . 05114 . 06242 . 00495	* .	CD .05143 .05348 .00502	5	CD .05142 .06351 .00510
	1 03SI (CARRIER			GRADIENT INTERVAL	CL . 19329 . 36175 . 08708	GRADIEN" INTERVAL	CL . 16921 . 38573 . 08457	GRADIENT INTERVAL	CL .17433 .39342 .08548	GRADIENT INTERVAL	Ct. . 19799 . 39002 . 08422	GRADIENT INTERVAL	CL .21303 .41301 .08334	GRADIENT INTERVAL	CL .21472 .41700 .08541
œ	TA 1/747 (1			3.29 GRAD	07 . 05947 . 09448 . 01809	3.29 GRAD	DY .06734 .05123 00629	3.30 GRAC	7407 .07407 .01904 74150	3.29 GRA[70 .07184 .06091 00479	3.29 GRA	DY .09661 .06355 01378	3.29 GRA	DY . 01577 . 02241 . 00280
E DATA - CA238	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L = 3	DX 19.87130 19.92830 7+920.	RN/L =	0X 19.90690 19.96030	RN/L =	0x 19.86250 19.96860	RN/L =	0x 19.93210 19.97520	RN/L *	DX 19.92050 19.89040 01254	RN/L =	DX 20.01850 19.99160 01136
TABULATED SOURCE	ARC 1		1339.96 00 	311/0	ALPHAC 8.31512 10.27020 1.01055	312/0	ALPHAD 8.07854 10.45100	313/0	ALPHAO B.08432 10.40250	314/0	AL PHAO 8.07297 10.17570	315/ 0	ALPHAO 8.03821 10.28860	. 316/ 0	AL PM40 8.086:9 10.27300 .92545
TABULAT		DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH .58609 .58715 .00054	RUN NO.	MACH .58702 .58632 00027	RUN NO.	MACH .58709 .58711	RUN NO.	MACH .58708 .58717	RCN NO	MACH .58721 .58687 00014	RUN NO	масн . 58 699 . 58 709 . 00004
IR 76		REFERENCE DATA	5500.0000 SQ.FT 327.7800 IN. 2348.0400 IN.		ALPHAC 2.440 4.374 GRADIENT		ALPHAC 1.989 4.549 GRADIENT		ALPHAC 1.961 4.524 GRADIENT		ALPHAC 1.982 4.262 GRADIENT		ALPHAC 1.970 4.370 GRADIENT		ALPHAC 2.003 4.371 GRAD:ENT
DATE 22 MAR			SREF LREF BREF = SCALE = 6		DZ 7.139 7.034		02 9.707 9.890		DZ 14.857 14.654		02 29.665 29.802		DZ 44.676 44.732		02 50.207 50.098

TABULATED SOURCE DATA - CA23B

32

1 75 1		5 000. 000. 000.		CBL . 00518 . 00649		CBL .00413 .00557 .00061		CBL .00409 .00491 .00034		CBL .00309 .00318		CBL .00158 .00181		CBI. .00132 .00160 .00012
P) (08 OCT	DATA	STAB = ELEVON = DX		CYN 00524 00486		CYN 00421 00241		CYN 00330 -00153		CYN 00171 .00002 .00079		CYN -:00001 :00160		CYN 00053 .00033
(RNH032)	PARAMETR1C			CY .00425 .00287 00071		CY .00503 .00231		CY .00498 .00187 00130		CY .00389 .00145 00111		CY .00516 .00303 00091		CY .00703 .00729
		BETA = RUDOER = 10RB = 07	.00/ 5.00	CLM 19755 22798 01566	0/ 5.00	CLM 19890 24257 01834	0/ 5.00	CLM 20628 24753 01728	0/ 5.00	CLM 21986 25667 01673	0/ 5.00	CLM 23483 27318 01649	0/ 5.00	CLM 24268 27851 01514
RRIER DATA			* ?-	00 . 05949 . 05915	VAL = -5.00	CD . 04962 . 06045	/AL = -5.00.	CD . 04975 . 06099	/AL = -5.00.	CD . 05062 . 06126 . 00484	'AL = -5.00	CD . 05101 . 06261 . 00499	AL = -5.00	CD .05086 .06322 .00522
AT1 03S1 ICARRIER			GRADIENT INTERVAL	CL .17002 .32833 .08159	GRADIENT INTERVAL	CL . 15579 . 34877 . 08106	GRADIENT INTERVAL	CL .15782 .35111	DIENT INTERVAL	CL .17690 .35662 .08170	GRADIENT INTERVAL	CL . 19508 . 38699 . 08253	GRADIENT INTERVAL	CL . 20651 . 40294 . 08300
747/1			3.30 GRA	DY 10.15720 10.05880 05071	3.30 GRA	DY 10.15740 10.16020	3.30 GRA	DY 10.08520 10.13390 .02040	3.30 GRADI	DY 10.14070 10.08630 02473	3.30 GRAD	DY 13.15200 10.08960	3.30 GRAC	DY 10.12630 10.14780 .00908
14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	DX 07736 08334 00308	RN/L =	DX 11409 03860 .03171	RN/L =	DX 16247 02661 .05691	RN/L =	DX 19638 07071	RN/L =	DX 18575 12371 .02668	RN/L =	0x 07292 12245 02093
AAC		= 1339. = 190.	. 321/ 0	ALPHAO 8.24764 10.25180 1.03284	. 322/ 0	ALPHAO 8.08363 10.31420 .93692	323/ 0	ALPHAO 8.10072 10.27970 .91286	324/0	ALPHAO 8.18816 10.19140 .91066	325/ 0	ALPHAO 8.07435 10.22660	326/ 0	ALPH40 8.02243 10.27170
	E DATA	XMRP YMRP ZMRP	RUN NO	MACH . 58661 . 58746 . 00044	RUN NO	. 58731 . 58731 . 58718 00005	RUN NO	MACH .58740 .58733 00003	RUN NO.	MACH .58735 .58780 .00021	RUN NO.	MACH .58747 .58772 .60011	RUN NO.	MACH .58755 .58817 .00026
	REFERENCE DAT	5500.0000 50.F 327.7800 IN. 2348.0400 IN.		ALPHAC 2.384 4.324 GRADIENT		ALPHAC 1.999 4.379 GRADIENT		ALPHAC 1 · 980 4 · 367 GRADIENT		ALPHAC 2.049 4.248 GRADIENT		ALPHAC 1.976 4.301 GRADIENT		ALPHAC 1.958 4.325 GRADIENT
		SREF = LREF = BREF = SCALE =		5.217 3.310		D2 7.247 7.563		02 10.032 9.896		02 15.217 15.047		02 29.998 29.890		02 44 - 648 44 - 989

DATE 22 M	MAR 76	TABULATED	TED SOURCE DATA	. DATA - CA238	338					PAGE	33
			ARC	14-120(CA23B)	1/47/1	AT1 0351 (CAR	(CARRIER DATA)		(RNH032)) (08 OCT	(22)
	REFERENCE	DATA							PARAMETR1C	DATA	
SREF = LREF = BREF = SCALE =	5500.0000 SQ.F. 327.7800 IN. 2348.0400 IN.	T. XMRP YMRP ZMRP	= 1339. = 190.	9000 IN. XC 0000 IN. YC 7500 IN ZC				BETA # RUDDER # 10RB # DY		STAB # ELEVON # DX # MACH #	5.000 .000 .600
		RUN NO.	327/ 0	RN/L =	3.30 GR	GRADIENT INTERVAL	ξ.	.00/ 5.00		•	
02 49.978 50.163	ALPHAC 1.969 4.264 GRADIENT	MACH . 58820 . 58920 . 00044	ALPHAO 8.02344 10.19110	DX -,02053 -,04478 -,01056	07 10.13650 10.15550 .00998	CL .21371 .39983 .08110	.05131 .05131 .06280	CLM 24538 27995 01506	. 00005 . 00005 . 00005	CYN -,00088 -,00011 .00034	CBL .00081 .00157
			ARC	14-120(CA23B)	38) 747/!	AT1 0351 (CAF	(CARRIER DATA)		(RNH033	3) (08 OCT	1 75 1
	REFERENCE DAT	C DATA							PARAMETRIC	DATA	
SREF LREF BREF SCALE	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.	T. XMRP YMRP ZMRP	# 1339. # 190.	9000 IN. XC 0000 IN. YC 7500 IN ZC				BETA RUDDER TORB DY		STAB = ELEVON = DX HACH =	5.000 .000 .000 .600
		RUN NO	. 331/0	RN/L =	3.30 GF	GRADIENT INTERVAL	رة - 5.	00/ 5.00			
02 7.500 7.613	ALPHAC 2.445 4.292 GRADIENT	MACH: .58922 .58876 00025	ALPHAO 10.34440 12.27760 1.04761	DX 06667 14319 04147	07 10.07820 10.09130	CL .16246 .30762 .07866	CD .04858 .05619 .00412	CLM 168':4 19812 01608	. 00203 00162 00198	CYN 00342 00125 .00118	CBL .00539 .00622 .00045
		RUN NO	. 332/ 0	RN/L =	3.32 GF	GRADIENT INTERVAL	-5.	00/ 5.00			•
02 10.263 9.859	ALPHAC 1.907 4.322 GRADIENT	MACH .58952 .58910 00017	ALPHAO 10.03580 12.24310	0x 22873 09624 05486	DY 10.09230 10.08730 00530	CL .12172 .31936 .08184	CD .04699 .05715 .00421	CLM 16301 20631 01793	CY .00210 00215	CYN 00280 00007	CBL .00548 .00577 .00012
		RUN NO	. 333/ 0	RN, L =	3.31 6	GRADIENT INTERVAL	۳ رځ.	00/ 5.00			
02 15.012 14.957	ALPHAC 1.933 4.327 GRADIENT	MACH . 58891 . 59912 . 00009	ALPHAO 10.03310 12.27130	62.19577 19577 10328 0390 5	10.12510 10.09060	CL .14139 .33713	CD . 04803 . 05874 . 06447	CLM '8188 22345 01736	CY .00143 00354 00208	CYN 00119 .00187	CBL .00381 .00400 .00008
		NON NO	334/ 0	RN/L =	3.31 6	GRADIENT INTERVAL	-5.	00/ 5.00			
02 29.834 29.957	ALP-AC 1.958 1.352	МАСН . 58943 . 58888	ALРНAO 10.02850 12.31310	DX 19612 15854	07 10.04890 10.074+0	CL .17488 .37534	CD . 04966 . 06162	CLM 21448 25418	.00101	CYN .00151 .00373	CBL .00184 .00174

REFERENCE DATA	ARC	C 14-120(CA23B)	1/147	AT1 0351 (CAF	(CARRIER DATA)		(RNH033)	33) (08 OCT	0CT 75)
							PARAME TRIC	C DATA	
5500.0000 SQ.FT. XM 327.7800 IN. YM 2348.0400 IN. ZM .0125	YMRP # 1339. YMRP # 190.	.9000 IN. XC .0000 IN. YC .7500 IN ZC				BETA RUDDER I 10RB RUDDER I 10	.000 .000 .000 .000	STAB # ELEVON # OX # MACH #	5.000 .000 .600
AUN NO	NO. 335/ 0	RN/L =	3.30 GRA	GRADIENT INTERVAL	ı,	.00/ 5.00			
ALPHAC MACH 1.871 .58683 4.278 .58661 GRADIENT00009	ALPHAO 9.93220 12.24790	DX 17406 20324 01213	DY 10.09900 10.09270 00262	CL . 19100 . 38752 . 08167	CD . 05048 . 06238 . 00495	CLM 22877 26698 01588	CY . 00515 . 00551 . 00015	CYN .00045 .00129 .00035	CBL . 00099 . 00168 . 00029
RUN NO	NO. 336/ 0	RN/L =	3.30 GRA	GRADIENT INTERVAL	/AL = -5.00,	0/ 5.00			
ALPHAC MACH 1.913 .58789 4.260 .58739 GRADIENT00021	ALPHAO 9.94862 12.23090 .97225	0X -,10542 -,17171 -,02824	DY 10.11940 10.08420 01500	Ct . 19477 . 39026 . 08328	.05033 .05033 .06201	CLM 23210 26887 01566	CY .00784 .00739 00019	CYN 00037 .00053	CBL .00112 .00192 .00034
	ARC	C 14-120(CA23B)	747/1	AT1 03S1 (CAF	(CARRIER DATA)		(RNH034)	34) (08 OCT	(1 75)
REFERENCE DATA							PARAME TRIC	DATA	
5500.0000 SQ.FT. XMRP 327.7800 IN. YMRP 2348.0400 IN. ZMRP .0125	нии	339.9000 IN. XC .0000 IN. YC 190.7500 IN 2C				BETA # RUDDER = 10RB # DY *	000.	STAB = ELEVON = DX = MACH =	5.000 .000 .600
RUN NO	40. 341/ 0	RN/L =	3.31 GRA	GRADIENT INTERVAL	'n Ĉ	00/ 5.00			
ALPHAC MACH031 .58648 2.266 .58717 4.259 .58774 GRADIENT .00029	ALPHAO 5.90009 8.09199 10.13540	0X -,06742 -,04621 -,02054 01088	07 .00578 .02682 00171	CL 04941 .14793 .30740 .08325	CD .04580 .05055 .05895 .0304	CLM 12412 17441 20966	CY .01337 .01463 .01637	CYN 00333 00299 00286	CBL 00009 .00055 .00063
RUN NO	VO. 342/ 0	RN/L =	3.31 GRA	GRADIENT INTERVAL	- LT.	.00/ 5.00			
ALPHAC MACH127 .58815 2.324 .58765 4.353 .58723 GRADIENT00020	ALPHAO 6.04215 8.16733 10.29310	0X 10713 .14690 04005	07 00757 06245 00326	CL 04746 .15886 .32087 .08228	CD .04548 .05102 .05000	CLM 12263 18404 21888 02160	CY .01174 .01460 .01611 .00098	CYN 00329 00306 00281	CBL .00056 .00054 .00047

35	(27)		5.000 .000 .600		CBL 000220 .00058 .00071		.00021 .00049 .00069		CBL 00008 .00014 .00073		CBL 00035 .00051 .00030		CBL 00016 .00083 .00083
PAGE	(08 OCT	DATA	STAB # ELEVON = DX # MACH =		CYN -,00303 -,00264 -,00226		CYN 00280 00248 00198		CYN 00233 00198 00152		CYN 00293 00266 00195		CYN 00323 00297 00263
	(RNH034)	PARAMETRIC I	0000.		CY . 01182 . 01352 . 01445		CY .01123 .01291 .01393		CY .01036 .01283 .01400		CY .01248 .01384 .01421		CY .01292 .01335 .01504
		_	BETA RETUDDER RETUDDE	00/ 5.00	CLM 14010 20141 23194 02061	00'5'/0	CLM 14784 23917 23973 02063	0/ 5.00	CLM 16048 22071 24990	00/ 2.00	CLM 18075 24053 26954 01977	00/ 5.00	CLM 19234 24862 27738
	(CARRIER DATA)			*	.04590 .05172 .05015	'AL = -5.00,	CD .04592 .05192 .06093	/AL = -5.00/	CD . 04591 . 05245 . 06169	ii rų	CD . 04594 . 05296 . 06277	۳. ک	04572 . 04572 . 05300 . 06300
	0351			GRADIENT INTERVAL	CL 04297 .17326 .32465	GRADIENT INTERVAL	CL 03164 .17916 .33463 .08150	GRADIENT INTERVAL	CL 02562 19437 .34947 .08341	GRADIENT INTERVAL	CL 00276 .22081 .38015	GRADIENT INTERVAL	CL . 01604 . 23662 . 39906 . 08468
	11 747/1 AT1			3.30 GRAD	07 02328 04725 04352	3.30 GRAD	DY 02468 03964 06921 00968	3.30 GRAE	07 04966 05815 07945	3.29 GRA	0Y 00339 04821 10290 02165	3.30 GRA	DY 05370 05628 .01683
DATA - CA238	ARC 14-120(CA23B)		.9000 IN. XC .0000 IN. YC .7500 IN ZC	RN/L =	0X -,13205 -,07014 -,00640	EN/L =	0x 13020 .06279 05789	RN/L =	0X 11810 .06055 07864	RN/L =	0X 09203 09565 09065	RN/L =	0x -,00966 -,13594 -,15327 -,03264
TED SOURCE	ARC		1333.9 .0 .190.7	343/0	ALPHAO 5.90381 8.21305 10.11280	344/ 0	ALPHAO 5.93582 8.23296 10.19170	. 345/ 0	ALPHAO 5.91142 8.21363 10.17930	. 346/ 0	ALPHAO 5.88621 8.27416 10.18430	. 347/ 0	ALPHAO 5.90152 8.25624 10.22080
TABULATED		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH . 58717 . 58697 . 58774	RUN NO	MACH .58774 .58683 .58677 00022	RUN NO	MACH .58763 .58672 .58738	RUN NO	MACH .58604 .58747 .58710	PUN NO	масн . 58716 . 58716 . 58767
R 76		REFERENCE DAT	5500.0000 SO.F 327.7800 IN. 2348.0400 IN. .0125		ALPHAC 285 2.312 4.212 GRADIENT		ALPHAC 243 P. 334 4. 253 GRADIENT		AL PHAC 254 2 .332 4 .248 6RADIENT		ALPHAC 267 2.360 4.269 GRADIENT		ALPHAC 235 2.345 4.291 GRADIENT
DATE 22 MAR			SREF = 59 LREF = 59 BREF = 2 SCALE = 2		02 7.400 7.390 7.046		02 9.858 9.870 9.840		02 14.745 14.663 14.715		02 29.743 29.911 29.627		02 44.607 44.784 44.631

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TABULATED SOURCE DATA - CA238

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(5/ 1		5.000		CBL .00942 .00091 .00142		CBL .00045 .00049 .00113	1 75 1			5.000 .000 .000 .600		CBL 00044 .00037 .00041		CBL 00042 .00033 .00003
T) (08 OCT	DATA	STAB # ELEVON # DX MACH #		CYN 00299 00286 00257		CYN 00302 00280 00228	5) (08 001		DATA	STAB ELEVON BOX MACH		CYN 00206 00168 00131 .00018		CYN 00214 00170 00125
(RIHO34	PARAME TRIC	000.		.01105 .01350 .01350		CY .01090 .01360 .01439	(RNH035)		PARAMETRIC	, 000 , 000 , 000 , 000		CY .01157 .01177 .01356		CY .01145 .01271 .01347
		BETA RUDDER I IORB DY	.00/ 5.00	CLM 19230 25094 27941 01951	00/ 5.00	CLM 19273 25337 28063 01951				BETA # RUDDER # 10RB # DY	00/ 5.00	CLM 19977 23977 26866 01630	00/ 5.00	CLM 19786 24730 27411 01709
(CARRIER DATA)			# 5	CD .04531 .05259 .06265	5.	CD .04521 .05242 .06295	(CARRIER DATA)				" rČ	CD . 04772 . 05341 . 06254 . 00347	L = -5.	CD . 04732 . 05383 . 06332
AT1 0351 (C.			GRADIENT INTERVAL	CL .01551 .23899 .40272 .08589	GRADIENT INTERVAL	CL . 01694 . 24251 . 40928	AT1 0351 (C/				GRADIENT INTERVAL	CL 00122 .18857 .35002 .08292	GRADIENT INTERVA	CL 00517 .20924 .36135
747/1			3.30 GR/	.01479 .02815 .05749	3.31 GR/	.13288 .00830 .09148	747/1				3.30 GRA	07 .05360 .12459 .01675	3.29 GRA	70 .04314 .06432 .0737
14-120(CA23B)		9000 in. xC 0000 in. yC 7500 in zc	RN/L =	DX .08819 16437 16268	RN/L =	. 11708 19266 16063 06384	14-120(CA23B)			.9000 IN. XC .0000 IN. YC .7500 IN ZC	RN/L =	DX 07524 03598 04991	RN/L =	0X - 18854 - 03484 - 03851
ARC		# 1339.	. 348/ 0	ALPHAO 5.88468 8.25858 10.19200	. 349/ 0	ALPHAO 5.85348 8.18336 10.20200	ARC			# 1339 # 190	. 351/ 0	ALPHA0 3.99746 6.14693 8.16058	. 352/ 0	ALPHAO 4.00651 6.30510 8.22000
	CE DATA	FT. XMRP YMRP ZMRP	RUN NO	MACH .58785 .58817 .58761 00004	RUN NO	MACH . 58759 . 58818 . 58756		\$ 0,44	4. A.	FT. XMRP.	RUN NO	MACH .58697 .58780 .58795	RUN NO	мАСН .58702 .58736 .58712
	REFERENCE DAT	5500.0000 SQ 327.7800 IN 2348.0400 IN		ALPHAC 239 2 . 361 4 . 269 GRADIENT		ALPHAC 279 2 . 289 4 . 275 GRADIENT		REFERENCE DAT	NET ENEM	5500.0000 SO. 327.7800 IN. 2348.0400 IN.		ALPHAC .007 2.270 4.244 GRADIENT		ALPHAC 212 2.387 4.282 GRAD;ENT
		SREF "LREF" BREF "SCALE "		DZ 49.960 50.084 50.051		02 61.655 61.629 61.640				SREF = LREF = BREF = SCALE =		02 3.392 3.273 3.233		DZ 7.633 7.582 7.362

37	1 27		5.000 .000 .800		CBL .00220 .00023 .00011		CBL 00025 00033 .00041		CBL .00040 .00073 .00075		CB. . 00010 . 00038 . 00076
PAGE	(08 OCT	DATA	STAB = ELEVON = DX *		CYN 00212 00165 00115		CYN 00188 00135 00097		CYN 00274 00259 00205		CYN 00304 00260 00232
	(RNH035)	PARAMETRIC [0000.7		CY .01087 .01296 .01375		CY .01120 .01278 .01320		. 01205 . 01442 . 01516		CY .01268 .01394 .01564
		_	BETA = RUDDER = IORB = DY =	0/ 5.00	CLM 20038 25052 27696 01726	0/ 5.00	CLM 20208 25333 28065	0/ 5.00	CLM 20706 26048 28801 01788	00/ 2.00	CLM 20968 26083 28956 01774
	RRIER DATA)			/AL = -5.00/	CD .04709 .05356 .06311	/AL = -5.00/	CD .04674 .05378 .05366 .00365	VAL = -5.00/	CD .04607 .05338 .06370	π. Τυ	CD .04590 .05289 .06323
	1 0351 (CARRIER			GRADIENT INTERVAL	CL .00046 .21313 .36845	GRADIENT INTERVAL	CL .00240 .22277 .38158	GRADIENT INTERVAL	CL .01410 .24000 .40636 .08594	GRADIENT INTERVAL	CL . 02695 . 24121 . 41150
82	3) 747/1 ATI			3.29 GRA	.06173 .06173 .06580 0658	3.29 GRA	70 90440. 983450. 96600. -	3.29 GRA	07 .08920 .05612 .07042	3.30 GRA	07 .04655 .04817 .06498
DATA - CA238	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	0X 11309 1518 02549	FN/L =	DX -,18325 -,05927 -,07338	RN/L =	DX 06585 11845 17999 02473	RN/L =	DX . 06793 - 14780 - 19731 - 05989
TABULATED SOURCE DATA	ARC		1339.90 00. = 190.75	353/ 0	ALPHAO 3.95156 6.21534 8.18827 94488	354/ 0	ALPHA0 3.94923 6.21535 8.22508 .93174	355/ 0	ALPHAO 3.91348 6.26241 8.23413	356/ 0	ALPHAO 3.85960 6.23703 8.20431
TABULA		DATA	T. XMRP YMRY ZMRP	RUN NO.	MACH .58759 .58803 .58849	RUN NO.	MACH .58842 .58832 .58828 00003	RUN NO.	MACH .58946 .58900 .58907	RUN NO.	74CH 588792 58850 56890
AR 76		REFERENCE DATA	327.7800 IN. 2348.0400 IN. 0125		AL PHAC - 213 2 . 313 4 . 259 GRADIENT		AL PHAC 270 2.324 4.334 GRADIENT		ALPHAC 272 2.346 4.294 GRADIENT		ALPHAC 271 2 . 322 4 . 260 GRADIENT
DATE 22 MAR			SREF = 1 LREF = 6 BREF = 6		02 9.664 9.916 9.803		DZ 15.113 14.808 14.693		02 29.891 29.979 29.891		20 644.449 644.449

38	15)		5.000 .000 .000 .600		CBL .00347 .00365		CBL .00349 .00421		CBL .00358 .00375		CBL .00395 .00447 .00021		CBL .00425 .00419		CBL .00473 .00463 00004
PAGE	1) (2) OCT	DATA	STAB = ELEVON = DX = MACH =		CYN 02004 02035 00017		CYN 02004 02032 00012		CYN 02099 02090		CYN 02132 02106 .00011		CYN 02155 02122		CYN 02338 02291 . 00021
	(RNH036)	PARAMETR1C	000.01 6.000.000.000.		CY .04019 .04380		CY .03928 .04461		CY .04116 .04394 .00118		CY .04150 .04442		CY .04188 .04502		.00120
			BETA RUDDER TORB TORB TORB	0/ 5.00	CLM 17938 21146 01695	0/ 5.00	CLM 17568 22127 01906	0/ 5.00	CLM 19296 23484 01772	0/ 5.00	CLM 19966 24123 01726	0/ 5.00	CLM 21127 25265 01741	0/ 5.00	CLM 23181 26302 01608
	RRIER DATA)			-5.0	00 .05955 .00417	VAL = -5.00	. 05086 . 05100 . 06100	VAL = -5.00.	CD . 05162 . 06214 . 00445	/AL = -5.00	CD . 05204 . 06301 . 00456	/AL ≠ -5.00,	CD . 05269 . 06402 . 00476	/AL = -5.00,	. 05323 . 05460 . 00505
	ATI 03SI (CARRIER			GRADIENT INTERVAL	CL .15517 .30568 .07955	GRADIENT INTERVAL	CL .14006 .33398 .08105	GRADIENT INTERVA	CL .15692 .34657 .08026	GRADIENT INTERVAL	CL .16741 .35828 .07925	GRADIENT INTERVAL	CL .18313 .37808 .08201	GRADIENT INTERVAL	CL .21619 .40131 .08223
38	747/1			3.32 GRA	07 .21706 .2:141	3.31 GRA	DY .16706 .17088	3.30 GRA	0Y .22780 .18695 01729	3.30 GRA	DY .21021 .16889 01716	3.29 GRA	DY .20236 .12947 03066	3.29 GRA	07 .17624 .11332 02795
DATA - CA238	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L *	. 03672 16900 16991		10843 07058 01582	RN/L ≈	DX 10956 .01898 .05440	RN/L =	. 11920 04720 02990	RN/L =	0x 09596 02118	RN/L *	0X 17520 14877 .01174
ATED SOURCE	ARC		1339.	. 361/ 0	ALPHAO 8.14688 10.19950 1.08489	. 362/ 0	ALPHAO 8.04539 10.31600	. 363/ 0	ALPHAO 8.11744 10.25970	. 364/ 0	ALPHAO 8.14182 10.39920	. 365/ 0	ALPHAO 8.15598 10.36750	. 366/ 0	AL PHAO B. 24 139 10.35100 .93709
TABULATED		CE DATA	TT. XMRP	RUN NO	MACH .58711 .58755	RUN NO	MACH .58735 .58653 00034	RUN NO	MACH .58735 .58622 00048	RUN NO	MACH .58585 .58629	RUN NO	MACH . 58585 . 58527 00025	RUN NO	MACH .58550 .58504 00020
3 76		REFERENCE	5500.0000 SQ 327.7800 IN 2348.0400 IN		ALPHAC 2.302 4.194 GRADIENT		ALPHAC 2.012 4.405 GRADIENT		ALPHAC 2.013 4.376 GRADIENT		ALPHAC 2.049 4.457 GRADIENT		ALPHAC 2.097 4.474 GRADIENT		ALPHAC 2.159 4.411 GRADIENT
DATE 22 MAR			SREF = 5 LREF = 2 BREF = 2 SCALE =		02 1.654 2.469		02 2.877 3.365		02 7.393 7.226		02 9.858 10.104		02 14.553 14.643		02 29.819 29.992

5.000 .000. .000.		CBL .00511 .00466 00019		CBL .00468 .00465 00001		CBL . 00468 . 00488	1 75)		-1.000 .000 .000 .600		CBL .00066 .00041 .00064
STAB # ELEVON # DX # MACH #		CYN 02391 02368 .00010		CYN 02399 02346 .00022		CYN -,02365 -,02322 -,00019	-	DATA	STAB # ELEVON # DX # MACH #	٠	CYN 00159 00142 00125
. 000 . 00 6 . 000 . 000		CY .04517 .04937 .00181		CY .04478 .04919 .00182		CY . 04563 . 04882 . 00140	(RNH037	PARAME TRIC	000. 000. 6.000		. 00858 . 01110 . 01463
BETA = RUDDER = 10RB = DY	0/ 5.00	CLM 23985 27555 01539	10/ 5.00	CLM 23787 27894 01694	00/ 2:00	CLM -,24642 -,28083 -,01511			BETA = RUDDER = 10RB = DY	20/ 5.00	CLM .17746 .14793 .10923 01792
	# ()	CD . 05255 . 06456 . 00518	n	CD .05234 .06530 .00535	11	CD . 05304 . 06510 . 00530	RRIER DATA				.04533 .04681 .05177 .05177
	DIENT INTER	CL .21606 .40553	DIENT INTER	CL . 20586 . 42895 . 09202	DIENT INTER	CL . 23842 . 42405 . 08153	0351				CL 06065 .07983 .24186
	3.29 CRA	DY . 16956 . 15247 0 J737	3.30 GRA	0Y . 16630 . 15838 00327	3.30 GR/	DY .13774 .12725 00461	1/447			3.33 GR	07 .09365 .06646 .05405 01028
ZZZ	RN/L =	XD 1351.7 09769 75510.	RN/L =	DX 04310 11005 02761	RN/L =	DX -,02430 -,04193 -,00774	14-120(CA2		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	0x - 10765 - 10093 - 12705
1339	. 367/ 0	ALPHAO B.16577 10.31883	. 368/ 0	ALРНAO 8.08551 10.37690	369/0	ALPHAO 8.24539 10.35640	ARC		1339.	0 3717 0	ALPHAO 6.33729 8.24052 10.27580
FT. XMRP. YMRP. ZMRP	RUN NO	MACH .58538 .58637	RUN NO	MACH . 58474 . 58435 00016	RUN NO	MACH .58502 .58414 00039		ICE DATA		N. N.	MACH .58987 .59007 .59089
5500,0000 SQ. 327,7800 IN. 2348,0400 IN.		ALPHAC 2.052 4.371 GRAD!ENT		ALPHAC 2.015 4.439 GRADIENT		ALPHAC 2.140 4.416 GRADIENT		REFEREN	827		AL PHAC . 521 2.297 4.335 GRADIENT
SREF # BREF # SCALE #		DZ 45.057 44.937		02 50.129 50.420		DZ 62.057 61.853	15		SREF # LREF # BREF # SCALE #		02 1.955 1.879 1.932
	# 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC	# 5500.0000 \$Q.FT. XMRP = 1339.9000 IN. XC	# 5500.0000 \$Q.FT. XMRP = 1339.9000 IN. XC	= 5500.0000 \$0.FT. XMRP = 1339.9000 IN. XC	## 5500.0000 5Q.FT. XMRP = 1339.9000 IN. XC	## 5500.0000 \$Q.FT. XMRP = 1339-9000 IN. YC	SHET = 23-0000 SOLFT. WHRP = 1339-9000 IN. YC BREE = 23-0000 IN. YMRP = 190.7300 IN. YC BREE = 23-0000 IN. YMRP = 190.7300 IN. YC BREE = 23-0000 IN. YMRP = 190.7300 IN. YC BREE = 23-0000 IN. YMRP = 190.7300 IN. YC BREE = 23-0000 IN. YMRP = 190.7300 IN. YC BREE = 23-0000 IN. YMRP = 190.7300 IN. YC BREE = 23-0000 IN. YMRP = 190.7300 IN. YC BREE = 23-0000 IN. YMRP = 190.7300 IN. YC BREE = 23-0000 IN. YMRP = 190.7300 IN. YC BREE = 23-0000 IN. YMRP = 190.7300 IN. YC BREE = 23-0000 IN. YMRP = 190.7300 IN. YC BREE = 23-0000 IN. YMPP = 190.7300 IN. YC BREE = 23-0000 IN. YMPP = 190.7300 IN. YC BREE = 23-0000 IN. YMPP = 190.7300 IN. YC BREE = 23-0000 IN. YMPP = 190.7300 IN. YC BREE = 23-0000 IN. YMPP = 190.7300 IN. YC BREE = 23-0000 IN. YMPP = 190.7300 IN. YC BREE = 23-0000 IN. YMPP = 190.7300 IN. YC BREE = 23-0000 IN. YC BREE IN STAND IN SECOND IN IN SECOND IN STAND IN SECOND IN STAND IN SECOND IN STAND IN SECOND IN SEC	## 5500.0000 \$Q.FT. XHRP = 1339.9000 IN. XC	SCALE = 23-46 0.000 SO.FT. XYRP = 1339-9000 IN. XC LEFF = 23-46 0.000 IN. YRPP = 190.7500 IN. XC LEFF = 23-46 0.000 IN. YRPP = 190.7500 IN. XC LEFF = 23-46 0.000 IN. YRPP = 190.7500 IN. XC LEFF = 23-46 0.000 IN. YRPP = 190.7500 IN. XC SCALE = 23-46 0.000 IN. YRPP = 190.7500 IN. XC SCALE = 23-46 0.000 IN. YRPP = 190.7500 IN. XC RUN NO. 367/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00 ALPHAC HACH RICHARD DX IN. 18956	STATE STAT	SCALE = 2340,0000 SO. TT. WHRP = 1339 9000 IN. XC BREF = 2340,0000 SO. TT. WHRP = 1339 9000 IN. XC BREF = 2340,0000 IN. YHRP = 10000 IN. XC BREF = 2340,0000 IN. YHRP = 10000 IN. XC BREF = 2340,0000 IN. YHRP = 10000 IN. XC BREF = 2340,0000 IN. YHRP = 10000 IN. XC BREF = 2340,0000 IN. YHRP = 10000 IN. XC BREF = 2340,0000 IN. YHRP = 1339 9000 IN. XC BREF = 2340,0000 IN. YHRP = 1339 9000 IN. XC BREF = 2340,0000 IN. YHRP = 1339 9000 IN. XC BREF = 2340,0000 IN. YHRP = 1339 9000 IN. XC BREF = 2340,0000 IN. YHRP = 1339 9000 IN. XC BREF = 2340,0000 IN. YHRP = 1339 9000 IN. XC BREF = 2340,0000 IN. YHRP = 1339 9000 IN. XC BREF = 2340,0000 IN. YHRP = 1339 9000 IN. XC BREF = 2340,0000 IN. YHRP = 1339 9000 IN. XC BREF = 2340,0000 IN. YHRP = 1339 9000 IN. XC BREF = 2340,0000 IN. YHRP = 1339 9000 IN. XC BREF = 2340,0000 IN. YHRP = 1339 9000 IN. XC BREF = 2340,0000 IN. YHRP = 1339 9000 IN. XC BREF = 2340,0000 IN. YHRP = 1339 9000 IN. XC BREF = 2340,0000 IN. YHRP = 1339 9000 IN. XC BREF = 2340,0000 IN. YHRP = 1339 9000 IN. XC BREF = 2340,0000 IN. YHRP = 1339 9000 IN. XC BREF = 2340,0000 IN. YHRP = 1339 9000 IN. XC BREF = 2340,0000 IN.

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PAGE	.00 BO) (2	DATA	STAB # ELEVON = DX MACH #		CYN 00184 00117 00138		CYN 00121 00011 .00087		CYN 00119 00065 00084		CYN 00086 00062 00046		CYN 00147 00159 00132
	(RNH037)	PARAMETRIC	6.000 6.000 6.000		CY .00868 .01034 .01552		CY .00664 .01145 .01350		CY .00712 .00927 .01346		CY .00671 .01026 .01230		. 00729 . 01198 . 01383
			BETA # RUDDER # 10RB # DY	00/ 5.00	CLM .19357 .13800 .10156 02077	00/ 5.00	CLM .18477 .12241 .09073 02086	00/ 5.00	CLM .17561 .12200 .08335	0/ 5.00	CLM .16329 .11313 .07482 02004	0/ 5.00	CLM .14620 .09828 .05621
	(CARRIER DATA)			-5.	. 04541 . 04713 . 05210	μ. Ř	. 04561 . 04561 . 04794 . 05287	ه ال	.04577 .04577 .05362 .00168	/AL = -5.00/	. 04583 . 04788 . 05406	/AL = -5.00/	CD . 04562 . 04769 . 05480
	AT1 0351 (CA			GRADIENT INTERVAL	CL -,10922 .09485 .24733	GRADIENT INTERVAL	Ct. 10336 .11878 .26676 .08066	GRADIENT INTERVAL	CL 08912 .10834 .28119 .08098	GRADIENT INTERVA	CL 06674 .11574 .28800 .08017	GRADIENT INTERVAL	CL 05277 .13528 .32081 .08217
38	747/1			3.32 GRA	DY .16043 .13546 .12986 00723	3.32 GRA	07 .09567 .12690 .04585	3.31 GRAI	09762 . 09762 . 09804	3.31 GRA	07 .13141 .06667 .08480	3.32 GRA	. 12231 . 1292 . 11992 . 08067
DATA - CA23B	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	DX 14594 .11055 .00163	RN/L =	0X 08660 .05996 04563	RN/L =	DX 12387 .06698 06324	RN/L =	0x -, 14126 -, 05569 -, 06647	RN/L ≈	0x 12939 02203 18963 01215
TED SOURCE	ARC		1339.9	372/ 0	ALPHAO 6.14149 8.31124 10.30810	373/ 0	ALPHAO 5.97655 8.43460 10.32400	374/ 0	ALPHAO 6.09035 8.31062 10.42890	375/ 0	ALPHAO 6.22162 8.27672 10.39350	376/ 0	ALPHAD 6.11590 8.28595 10.47950
TABULATED		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .59019 .59040 .59036	RUN NO.	MACH .58959 .58950 .58887 00015	RUN NO.	MACH .58840 .58837 .58839	RUN NO.	MACH . 58910 . 58874 . 58844 00014	RUN NO.	MACH . 58885 . 58821 . 58919 . 00007
MAR 76		REFERENCE	5500.0000 SQ.FT 327.7800 IN. 2348.0400 IN. .0125		ALPHAC 073 2.415 4.372 GRADIENT		ALPHAC 184 2.515 4.363 GRADIENT		ALPHAC 096 2.401 4.474 GRADIENT		ALPHAC . 036 2.374 4.458 GRADIENT		ALPHAC ~.037 2.359 4.506 GRADIENT
DATE 22 M			SREF = BREF = SCALE =		02 3.611 3.412 3.341		02 7.238 7.611 7.497		02 10.003 9.942 10.030		DZ 14.990 14.729 14.795		02 29.795 29.929 30.138

,	15 1		-1.000 .000 .000 .600		CBL . 00.005 . 00067 . 00016		CBL .00032 .00065 .00084		CBL 00001 .00066 .00070 .00016	T 75)		5.000 5.000 .600		CBL 00002 00007 .00028
PAGE	(08 OCT	DATA	STAB = ELEVON = DX = MACH =	,	CYN 00194 00182 00190		CYN 00168 00193 00200		CYN 00195 00178 00179	.00 80) (8	DATA	STAB = ELEVON = DX = MACH =		CYN -,00290 -,00274 -,00301 -,00003
	(RNH037)	PARAMETRIC (6.000		CY .00829 .01255 .01470		.00718 .01288 .01551		CY .00896 .01261 .01426	(RNH038	PARAME TRIC	. 000 . 000 6. 000		CY .01170 .01453 .01735 .00130
		•	BETA = RUDDER = 10RB = DY	00/ 5.00	CLM .14423 .08536 .05192	0/ 5.00	CLM .13587 .08905 .04613	00/ 5.00	CLM . 13462 . 08460 . 04524 02024			BETA = RUDDER = 10RB = DY	00/ 5.00	CLM 0707B 12210 15668 01982
	(CARRIER DATA)			<u>.</u> .	. 04479 . 04800 . 05380 . 05201	/AL = -5.00,	.04523 .04523 .0452 .05517	1 - 5.	CD . 04529 . 04752 . 05448 . 06204	(CARRIER DATA)			رگ * ا	CD . 04452 . 04876 . 05652 . 00276
	0351			GRADIENT INTERVAL	CL 06525 .17043 .32095	GRADIENT INTERVAL	CL 03391 .15326 .34317 .08400	GRADIENT INTERVAL	CL 03087 .16576 .33989 .08381	AT1 0351 (CA			GRADIENT INTERVAL	CL 04880 .14417 .30672 .08195
8	3) 747/1 AT1			3.32 GRAD	07+74 .06594 .16210	3.31 GRA	05409 .05409 .13582 .10327	3.31 GRA	07 12051 09946 09337 00533	11747			3.34 GRA	08333 . 10096 . 08546 . 00058
DATA - CA238	14-120(CA23B		9000 IN. XC 0000 IN. YC 750G IN ZC	RN/L =	DX 04783 25301 09599 01614	EN/L ≠	DX 01251 24803 19505 04101	RN/L =	0x 22930 20140	14-1201CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	DX -16713 -16713 -16536 -10530
SOURCE	ARC 1		1339.	0 /778 .	ALPHAO 6.08589 8.42205 10.22770	. 378/ 0	ALPHAO 6.20914 8.27754 10.47610	0 /6/5 .	ALPHAO 6.10612 8.32028 10.33570	ARC		1339). 381/ 0	ALPHAO 5.98392 8.13110 10.37170 1.01018
DATE 22 MAR 76 TABULATED	E DATA	FT. XMRP. YMRP. ZMRP	RUN NO	MACH .58823 .58995 .58874	RUN NO	MACH .58791 .58759 .58783	RUN NO	MACH .58735 .58707 .58790		CE DATA	FT. XMRP YMRP I. ZMRP	SUN NO	MACH . 58938 . 58924 . 58902	
		REFERENCE DAT	5500.0000 SQ. 327.7800 IN. 2348.0400 IN.		ALPHAC 096 2.497 4.260 GRADIENT		ALPHAC .036 2.316 4.524 GRADIENT		ALPHAC 013 2.379 4.408 GRADIENT		REFERENCE	5500.0000 SQ 327.7800 IN 5348.0400 IN		ALPHAC .046 2.293 4.387 GRAD:ENT
		SREF = 59 LREF = 59 BREF = 2 SCALE = 2		02 45.027 44.952 44.914		DZ 50.481 50.592 50.369		02 61.632 61.965 61.651			SREF # BREF # SCALE # 6		02 1.563 1.569 2.306	

45	(27)		5.000 .000 .600		CBL .00028 .00039 .00048		CBL .00006 .00019 .00004		CBL 00010 .00020 .00025		CBL 00003 .00027 .00061		CBL .00035 .00058 .00096
PAGE	3) (08 OCT	DATA	STAB F ELEVON F DX MACH F		CYN 00374 00319 00319		CYN - 00299 - 00302 - 00000		CYN -,00287 -,00274 -,00284 -,00001		CYN 00294 00272 00249		CYN -,00272 -,00268 -,00232 .00008
	(RNH038)	PARAMETRIC			CY .01300 .01545 .01744		CY .01196 .01473 .01704		CY .01265 .01406 .01631		CY .01178 .01501 .00072		CY . 01073 . 01309 . 01368
			BETA RUDDER I IORB	00/ 5.00	CLM 07208 13254 16637 02153	00/ 5.00	CLM 09478 15187 18763 02097	00/ 5.00	CLM 10751 16249 19899 02065	.00/ 5.00	CLM 11806 18426 21679	.00/ 5.00	CLM 16001 22075 24950 01980
	(CARRIER DATA)			ئ	CD .04449 .05730 .05730	با	. 04481 . 04989 . 05860	" rù	CD . 04507 . 05947 . 05957	ا. ح	CD . 04453 . 05137 . 06021	ا. 5-	. 04521 . 05231 . 06183
	AT1 0351 (CA			GRADIENT INTERVAL	CL 03665 .15576 .31410	GRADIENT INTERVAL	CL 02844 .17202 .33330 .08138	GRADIENT INTERVAL	CL 01415 .17809 .34572	GRADIENT INTERVAL	CL 03639 .19982 .35759	GRADIENT INTERVAL	CL . 00938 . 22883 . 37677 . 08058
38	1/247			3.33 GRA	07 .10115 .08959 .05348	3.33 GRA	04 .06087 .08816 .09323	3.32 GRA	09783 .05753 .04705 00926	3.32 GRA	07 . 01465 . 07175 . 07290	3.32 GRA	. 09307 . 09307 . 06951 . 04147
DATA - CA23B	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	DX 19716 01894 08950	EN/L =		RN/L =	0X - 23948 - 12882 - 18941	RN/L =	0x 12720 08175 05165	RN/L ≈	DX -,11334 -,03463 -,16387 -,00681
ATED SOURCE	ARC		1339. 190.	. 382/ 0	ALPHAO 6.20728 8.36194 10.37440	. 383/ 0	ALPHAO 6.18939 8.27053 10.35840	. 384/ 0	ALPHAO 6.26151 8.30010 10.44550	. 385/ 0	ALPHAO 6.06450 8.39330 10.36830	. 386/ 0	ALPHAO 6,01263 8,40355 10,40330
TABULATED		CE DATA	YMAP YMAP ZMAP	RUN NO	MACH .58937 .58831 .58815	RUN NO	MACH .58823 .58845 .58629	PCN NO	MACH . 58749 . 59687 . 59640 00025	ON NO	MACH .58573 .58615 .58601	RUN NO	MACH .58674 .58734 .58719
3 76		REFERENCE DAT	5500.0000 SO 327.7800 IN 2348.0400 IN		ALPHAC .019 2.422 4.425 GRADIENT		ALPHAC 027 2.422 4.419 GRADIENT		ALPHAC . 047 2.409 4.489 GRADIENT		ALPHAC 141 2.495 4.418 GRADIENT		ALPHAC 165 2.497 4.402 GRADIENT
DATE 22 MAR			SREF = 5 LREF = 2 BREF = 2 SCALE = 2		02 3.468 3.699 3.469		02 7.736 6.902 7.339		DZ 10.309 9.703 10.031		DZ 15.037 14.866 14.876		02 30.004 29.816 30.280

. 43		5.000 5.000 .000 .600		CBL 00008 .00009 .00054		CBL 00033 .00026 .00108		CBL -,00018 .00039	1 75)		5.000 5.000 .000 .600		CBL .00312 .00376 .00034
PAGE (08 OCT	DATA	STAB = ELEVON = DX # MACH =	٠	CYN 00263 00254 00250		CYN 00283 00268 00238		CYN 00272 00253 .00006	9) (08 OCT	DATA	STAB = ELEVON = DX =		CYN 01996 01985 00006
(RNH038)	PARAMETRIC	.000 .000 6.000		CY .01134 .01325 .01521 .00088		CY . 01184 . 01342 . 01443		. 01116 . 01289 . 00065	(RNH039	PARAMETRIC	.000 10.000 6.000		57 .04483 .00092
	O.	BETA = RUDDER = 10RB = DY	/ 5.00	CLM 18509 23763 26773 01898	7.5.00	CLM 18564 26272 26915)/ 5.00	CLM 18642 24850 02348			BETA = RUDDER = 10RB = DY	00.5.00	CLM 13476 16270 01490
RIER DATA)			AL = -5.00/	CD .04576 .05281 .06319	AL = -5.00/	CD .04571 .05310 .06224 .00376	AL = -5.00,	CD .04502 .05325	(CARRIER DATA)			/AL = -5.00/	CD . 04944 . 05658 . 00381
1 0351 (CARRIER			GRADIENT INTERVAL	CL . 04412 . 24297 . 40815	GRADIENT INTERVAL	CL .03769 .25489 .39538 .08295	GRADIENT INTERVAL	CL . 02079 . 25891 . 09006	0251			GRADIENT INTERVAL	CL . 14696 . 29461 . 07876
B 747/1 AT1			.31	07776 .06432 .01982 .01029	.30	. 11843 . 08470 . 09634 00568	.30	. 11916 . 07553 01650	3) 747/1 AT1			3.36 GRA	. 05722 . 05722 00654 03401
DATA - CA23B		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L = 3	DX -, 10694 -, 06122 -, 21970 -, 02388	EN/L = 3	. 11060 - 18012 - 17500 - 06945	RN/L = 3	0X .12903 09098	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	0x 06697 04503 01165
TABULATED SOURCE DATA		1339.90 20.00 17.001 =	387/ 0	ALPHAO 6.21183 8.42103 10.41200	388/ 0	ALPHAO 6.07965 8.42727 10.28530	. 389/ 0	ALPHAO 5.98804 8.29901 .87406	ARC		= 1339. = 190.	. 391/ 0	ALPHAO 8.22485 10.21090 1.05936
TABULA	E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .58666 .58661 .58586	RUN NO.	MACH .58490 .58441 .58442	NON NO	MACH . 58473 . 58435 00014		E DATA	SG.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	MACH .59047 .59098
MAR 76	REFERENCE DATA	5500.0000 SQ.FT 327.7800 IN. 2349.0400 IN. .0125		ALPHAC .070 2.481 4.448 GRADIENT		ALPHAC 037 2.513 4.284 GRADIENT		ALPHAC 115 2.529 GRADIENT		REFERENCE DATA	5500.0000 50. 327.7800 IN. 2348.0400 IN.		ALPHAC 2,388 4,263 GRADIENT
DATE 22 M		SREF * SOALE * SCALE * S		07 44.879 946.44 926.44		02 49.971 50.192 50.609		D DZ			SREF ** LREF ** BREF ** SCALE **		02 3.148 3.390

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3	1 75)		ru ru 000 000		CBL .0035 00037		CBL .00398 .00403 .00002		CBC .00451 .000451 00006		CBL . 1475 .00546 .00029		C3L .00481 .00453 00013		CBL .00476 .00479
39∀d	DO 80)	DATA	STAB = ELEVON = DX HACH =		.02145 02199 00023		CYN 02205 02233		CYN 02309 02289 .00009		CYN 02428 02423 00002		CYN 02442 02404 00018		CYN - 02425 - 02391 - 00015
	(RNH039)	PARAMETRIC D			CY , 04502 , 04962 , 00198		CY .04518 .04918		.04656 .04945 .00126		CY .04795 .05174 .00155	,	CY 04853 .05081 .00103		. 5090 . 5090
		a.	BETA RRUDDER RIORB R	/ · 5.00	CLM 14706 19071 01880	/ 5.00	CLM 15562 19937 01806	1 5.00	CLM -,17898 -,21768 -,01689	00.5 /	CLM 21114 25297 01708	00.5 /	CLM 23039 26464 01551	00/ 2.00	CLM 23248 26871 01594
	(CARRIER DATA)			AL = -5.00/	. 04967 . 05962 . 05429	AL = -5.00,	. 04987 . 05998 . 00417	AL = -5.00/	. 05114 . 06131 . 00443	'AL = -5.00/	. 05181 . 05389 . 00485	AL = -5.00.	CD . 05262 . 06379 . 00506	ស៊	CD . 05251 . 06399 . 00505
	0251			GRADIENT INTERVA	CL .14441 .33653 .08280	GRADIENT INTERVAL	CL . 14237 . 32594 . 07578	IENT INTERV	CL .16878 .34691 .07773	GRADIENT INTERVAL	CL . 18491 . 33098 . 084!3	GRADIENT INTERVAL	CL .21588 .39439 .08086	GRADIENT INTERVAL	CL .21430 .40082 .08206
æ	0 747/1 ATI			3.34 GRAD	70762 . 10762 . 05150 - 19917	3.34 GRAD	07 . 06343 . 05245 00453	3.34 GRADI	07 . 05544 . 06210 . 00290	3.33 GRAD	DY . 09299 . 08848 00184	3.33 GRAE	OY .08082 .05913 0983	3.33 GRA[DY . 05846 . 05556 00128
DATA - CA23B	14-120(CA23B)		9000 IN. XC 00000 IN. YC 7500 IN ZC	RN/L = 3	DX 14187 04368	RN/L = 3	0x 16160 07507	RN/L =	DX 19875 08338 .05034	RN/L =	DX 12810 07450 .02188	RN/L =	DX 08759 11783 01370	RN/L #	DX 01339 06019 02059
TABULATED SOURCE	ARC 1		1339.96 .00. * 190.75	392/ 0	ALPHAO 8.21903 10.38090 .93122	393/ 0	ALPHAO 8.09911 10.36610	. 394/ 0	AL PHAO 8.24803 10.35730	. 395/ 0	ALPHAO 8.11938 10.41400	. 396/ 0	AL PHAO 8.20736 10.31290 .95382	. 397/ 0	ALPHAO B.20360 10.36870 .95258
TABULA		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	МАСН . 58972 . 58997 . 00011	RUN NO	MACH . 59034 . 59082 . 00020	RUN NO	MACH . 59086 . 59122	RUN NO	MACH . 59014 . 59148 . 00055	RUN NO	MACH .58975 .59139 .00074	NON NO	MACH .59078 .59084 .00003
3 76		REFERENCE DATA	5500.0000 SQ. 327.7800 IN. 2348.0400 IN.		ALPHAC 2.139 4.461 GRADIENT		ALPHAC 2.001 4.424 GRADIENT		ALPHAC 2.141 4.433 GRADIENT		ALPHAC 2.045 4.494 GRADIENT		AL PHAC 2.160 4.357 GRADIENT		A:PHAC 2.123 4.396 GRAD;ENT
DATE 22 MAR			SREF # 59 LREF # 59 BREF # 20		02 7.31 <i>2</i> 7.376		02 9.885 10.083		02 15.083 14.830		02 29.781 29.790		02 44.565 44.873		02 50.586 50.569

t.S	15)		5.000 5.000 .600		CBL 00011 .00003 .00037		CBL 00048 .00035 .00045		CBL . 00004 . 00054 . 0007		CBL 00012 .00038 .00055		CBL -,00003 ,00078 ,00072
PAGE	(08 OCT	DATA	STAB # ELEVON # DX # MACH #		CYN 00366 00343 00343		CYN 00381 00362 00344 00008		CYN 00396 00367 00340		CYN 00377 00354 00317		CYN 00323 00291 00230
	(RNH0+0)	PARAMETRIC DA	.000 ST.		. 01499 . 01655 . 01848		.01448 .01583 .01853		. 01509 . 01519 . 01816		CY .01347 .01639 .01739		CY .01313 .01475 .01509
		α.	BETA = RUDOER = 10RB = DY	2.00	CLM 14542 19553 23150 01958	00.5 /	CLM 15131 20919 24128 02015	00.5 /0	CLM 16204 21512 24667 01993	00.5 /0	CLM 16643 23102 25576 02036	00/ 2.00	CLM 18851 24916 27379 01943
	RIER DATA)			AL = -5.00,	.04628 .05195 .06099	AL = -5.00,	CD .04656 .05282 .06163	/AL = -5.00	CD . 04655 . 05267 . 06151	L = -5.0	00 .04590 .05365 .06217	-5.	CD .04573 .05387 .06313
	1 O2S1 (CARRIER			GRADIENT INTERVAL	CL -, 02134 ., 18093 ., 3461 8 ., 08350	GRADIENT INTERVAL	CL 01306 .20176 .35582 .08210	RADIENT INTERVA	CL .00433 .20296 .35455	GRADIENT INTERVA	CL 01356 232+3 .36599 .08562	GRADIENT INTERVAL	CL . 00956 . 24845 . 38982
œ	11 747/1 AT1			3.33 GRAD	DY . 02300 . 03102 . 03823	3.32 GRAD	07 03074 03128 00535 00535	3.32 GRA[07 . 03665 . 00220 00556	3.32 GRA	07 .00998 02169 03747	3:33 GRA	07 .00963 .04983 04093
DATA - CA238	14-120(CA238		000 IN. XC 000 IN. YC 500 IN ZC	RN/L ≠	DX 03013 00823 08030	FN/L =	0x 05533 05879 06649	RN/L =	DX 10758 05513 10482	RN/L =	008800 - 08953 - 04039 - 0100	RN/L =	0X
TABULATED SOURCE DATA	ARC 1		= 1339.9000 = .0300 = 190.7500	401/0	ALPHAO 3.94885 6.16485 8.32227	402/0	ALPHA0 4.06526 6.36184 8.33848	403/ 0	ALPHAO 4.20285 6.34048 8.21470	0 /404	ALPHAO 4.02957 6.43765 8.22819	. 405/ 0	ALPHAO 4.05111 6.47107 8.27311
TABULA		DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH . 58575 . 58550 . 58596 . 00005	RUN NO.	MACH .58578 .58717 .58721	RUN NO.	MACH . 58614 . 58677 . 58746	RUN NO	MACH . 58614 . 58672 . 58737 . 00027	RUN NO	MACH . 58585 . 58784 . 58681 . 00026
3 76		REFERENCE DATA	5500.0000 SQ.F1 327.7800 IN. 2348.0400 IN.		ALPHAC 004 2.318 4.401 GRADIENT		ALPHAC 091 2.490 4.405 GRADIENT		ALPHAC . 024 2.449 4.293 6RADIENT		AL PHAC 155 2.568 4.303 GRADIENT		ALPHAC 120 2.563 4.329 GRADIENT
DATE 22 MAR			SREF = 5E LREF = 3 BREF = 23 SCALE = 23		02 3.048 3.021 3.274		02 7.066 7.198 7.335		9.793 9.766 9.745		02 14.781 14.685 14.592		59.804 29.804 29.944 29.835

ð.	15)		5.000 5.000 .000 600		CBL .00000 .00022 .00074	75)		5.000 5.000 .000 .500		CBL .00015 .00034 .00009		CBL 00006 .00057 .00027		CBL .00079 .00099
PAGE	1) (08 OCT	DATA	STAB = ELEVON = DX MACH =		CYN 00298 00278 00233	OB OCT	DATA	STAB = ELEVON # DX = MACH #		CYN 00338 00329		CYN 00354 00325 .00013		CYN 00333 00313
	(RNH040)	PARAMETRIC	0000.		. 01272 . 01466 . 01640 . 00080	(RNH041)	PARAMETRIC	00000		CY .01773 .01943 .00079		CY .01731 .01963 .00098		CY . 01641 . 01894 . 00112
			BETA = RUDDER = 10RB = 00Y	0/ 5.00	CLM -,19570 -,25380 -,28489		_	BETA = RUDDER = 10RB = 0Y	00.5 /0	CLM 18073 22458 02029	0/ 5.00	CLM ~.19427 ~.23734 ~.01830	0/ 5.00	CLM 20125 24274 01842
	OZSI (CARRIER DATA)			AL = -5.00/	. 04549 . 05330 . 06456 . 00413	(CARRIER DATA)			AL = -5.00/	CD . 05006 . 05946 . 00435	AL = -5.00	. 05103 . 05112 . 06112	AL = -5.00	CD . 05107 . 06138
				GRADIENT INTERVAL	CL . 02220 . 24572 . 42194 . 08755	0251			GRADIENT INTERVAL	CL . 15475 . 33576 . 08376	GRADIENT INTERVA	CL . 17291 . 35624 . 07788	GRADIENT INTERVA	CL .18618 .35973 .07708
B	1 747/1 AT1			.33	DY .03143 .02644 03328) 747/1 ATI			2.97 GRAD	0Y 17940 16385	96.	0' :6145 6305 00068	86.	DY 13853 15367 00672
DATA - CA23B	14-120(CA23B)		.9000 IN. XC .0000 IN. YC .7500 IN ZC	RN/L = 3	0X .03+55 15179 16754 04547	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L = 2	0X 08804 05681	RN/L × 2	0x 09292 05746 -01507	RN/L = 2	DX 14676 05126 .04241
SOURCE	ARC 1		1339.90 00. = 190.75	0 /90 1	ALPHAO 4.04059 6.34838 8.39585 .95184	ARC 1		= 1339.90 = .00 = 190.75	411/0	ALPHA0 6.15134 8.23496 .96420	412/0	ALPHAO 6.09329 8.36195 .96379	413/ 0	ALPHAO 6.27786 8.40798 .94691
TABULATED		E DATA	FT. XMRP YMRP I. ZMRP	RUN NO.	MACH .58600 .58754 .58637 .00010		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	масн . 48953 . 48981 . 00013	RUN NO.	MACH .48840 .48857 .00007	RUN NO.	МАСН . 48931 . 48962 . 00013
97 8		REFERENCE DAT	327.7800 IN. 2348.0400 IN.		ALPHAC 091 2.446 4.476 GRADIENT		REFERENCE DATA	5500.0030 SQ.FT 327.7800 IN. 2348.0430 IN. .0125		ALPHAC 2.137 4.298 GRADIENT		ALPHAC 2.085 4.439 GRADIENT		ALPHAC 2.218 4.469 GRADIENT
DATE 22 MAR			SREF = 56 LREF = 5 BREF = 23 SCALE = 23		D2 44.515 44.728 44.671			SREF = 55 LREF = 1 BREF = 23 SCALE =		02 3.328 3.325		02 6.838 7.184		DZ 9.770 9.780

DATE 22 M	MAR 76	TABULATED	ര്	CPCE DATA - CA23B	38					PAGE	L+1 :
			ARC	14-120(CA23B)	B) 747/1 AT1	0251	(CARRIER DATA)		(RNH041)	1) (08 OCT	1 75 1
	REFERENCE DATA	DATA						ı.	PARAME TRIC	DATA	
SREF # LREF # BREF # SCALE #	5500.0000 SQ.FT 327.7800 IN. 2348.0400 IN. .0125	T. XMRP YMRP ZMRP	= 1339.9000 = .0000 = 190.7500	000 IN. XC 000 IN. YC 500 IN ZC		•		BETA = RUDOER = 10RB = DY		STAB = ELEVON = DX = MACH =	5.000 5.000 .000 .500
		RUN NO.	414/ 0	RN/L =	2.97 GRAD	GRADIENT INTERVAL	AL = -5.00/	00.5 /0			
DZ 14.789 14.819	ALPHAC 1.986 1.441 GRADIENT	MACH .48945 .48934 00005	ALPHAO 6.05709 8.37959	06484 06484	DY 11379 09466 00779	CL . 18004 . 37562 . 07968	CD . 05106 . 06201 . 00446	CLM 21001 25452 01813	CY .01680 .01900 .00090	CYN 00343 00301	CBL 00901 . 00059
		RUN NO.	415/ 0	RN/L =	2.97 GRAD	GRADIENT INTERVAL	AL = -5.00,	0/ 5.00			
02 29.638 29.826	ALPHAC 2-215 4.415 GRADIENT	MACH .48943 .49048 .00048	ALPHAO 6.25657 8.35752	DX 07823 04136	DY 13076 13496 00191	CL . 21861 . 39591 . 08060	CD . 05205 . 06230 . 00466	CLM 23474 27120. 01657	CY .01657 .01818 .00073	CYN 00293 00263	CBL .00023 .00086 .00029
		RUN NO.	416/ 0	RN/L =	2.97 GRAD	GRADIENT INTERV	AL = -5.00	0/ 5.00			
70 70 71 71 71 71 71 71	ALPHAC 2.214 4.330 GRADIENT	MACH .49039 .48927 00053	ALPHAO 6.22878 8.27081 .96531	DX 07656 09178	DY 11385 16629 02479	CL .23604 .40657 .08061	CD . 05189 . 06244 . 00499	CLM 24356 27825 01640	CY .01552 .01860 .00145	CYN 00268 00254 00006	CBL .00075 .00085 .00005
			ARC	14-120(CA23B)	747/1	AT1 02S1 (CAR	(CARRIER DATA)		(RNH042)	2) (08 OCT	1 75 J
	REFERENCE DATA	DATA						_	PARAMETR1C	DATA	
SREF = LREF = BREF = SCALE =	5500.0000 SQ.FT 327.7800 IN. 2348.0400 IN.	T. XMRP YMRP ZMRP	1339,9 7.061 =	9000 IN. XC 0000 IN. YC 7500 IN ZC			•	BETA RUDDER BOY	0000. **	STAB ELEVON ON OX	5.000 5.000 .300
		RUN NO.	421/0	RN/L =	1.98 GRA	GRADIENT INTERVAL	, J	00/ 5.00			
02 3.128 3.123	ALPHAC 2.209 4.221 GRADIENT	МАСН . 29686 . 29674 00006	ALPHAO 6.15824 9.14827 .98892	0x 00134 .01001 .00564	DY 00631 02654 31006	CL . 18322 . 34282 . 07931	CD .05349 .06167 .00407	CLM 18297 22535 02106	CY .02257 .02455 .00098	CYN 00334 00315	CBL . 00004 . 00022 . 00009
		RUN NO.	422/ 0	RN/L =	1.98 GRAI	GRADIENT INTERVAL	۳. برگ	00.5 00			
DZ 7.085 7.303	ALPHAC 2.291 4.347 coadient	MACH .29723 .29615	ALPHAO 6.28847 8.32691	DX 07398 07285	DY 04136 01484	CL .20872 .35025 07370	CD .05422 .06279	CLM 19701 23811 01999	CY . 02192 . 02581 . 00189	CYN -,00310 -,00341 -,00015	CBL .00085 .00064 00010

PAGE 49	: 08 OCT 75)		-1.000 																	
	_	DATA	STAB	· .'																
	(ANHOD4)	PARAMETRIC	000.		CLN	00276	00266	00250	00244	00231	00263	00207	00214	00219	00235	00246	00224	00203	C+100	G0000.
			BETA = RUDDER =	-5.00/ 5.00	CSL	. 00079	. 00032	00030	. 00066	.00027	11000.	.00105	.00078	96000.	. 00120	. 00122	.00171	. 00192	.00280	÷1000.
					N O	49546	36559	27390	18676	09544	01047	.08564	1.17481	. 25647	. 35529	.44793	. 52841	.61595	. 70226	+0160
	471			GRADIENT INTERVAL =	∀	.03198	.03685	04010	.04220	15 1 HO.	. 04521	.04357	1+0+0	.03566	.02749	.01811	60600.	.00080	00356	+6000
238	38) 747/1 AT1			3.40 GR	PH1C	23157	34513	50648	86784	-2.24264	10.54370	1.35772	. 85236	.62554	. 50119	.41287	33469	. 28218	.20195	, 22054
SOURCE DATA - CA23B	ARC 14-120(CA238)		1339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC	RN/L =	BETAC	-, 02094	02217	02372	02568	02789	03458	02971	03296	03487	03700	0380 2	03622	03533	02880	00184
TABULATED SOURCE	ARC		N H H	0. 41/ 0	ALPHAC	-5.187	-3.684	-2.684	-1.696	712	.186	1.254	2.216	3.190	4.233	5.283	6.213	7.193	9.200	GRADIENT
TABUL		REFERENCE DATA	G.FT. XMRP N. YMRP N. ZMRP	RUN NO.	DZ	131.927	131.734	131.585	131.467	131.339	131.218	131.073	130.941	130.802	130.668	130.501	130.357	130.219	130.047	
IAR 76		REFERE	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.																	
DATE 22 MAR 76			SREF = LREF = BREF = SCALE =							1	Æ	U	G'	D.	11	7	; ·	2 <u>1</u>	a Iu	JE L

PAGE 50	0CT 75)		5.000 .600			100 100 100 100 100 100 100 100 100 100		5.000 5.000 600	•			
<u>a</u>	80)	C DATA	STAB = MACH		:	·	DATA	STA ELE DX MAC		CLN - 00206 - 00296 - 00306		CLN 00216 00216 00229
	CANHOOS	PARAMETR1C	000		Z00000000000000	0000:1 0000:1	PARAMETRIC			CSL .00042 .00104 .00102		CSL .00046 .00065 .00021
			BETA = RUDDER =	.00/ 5.00	200000000000000000000000000000000000000	·		BETA RUDDER I IORB	.00/ 5.00	CN 12635 .05653 .21568	.00/ 5.00	CN 13669 .07717 .23517 .08297
•				ii TU	N. 29603 21980 219803 11979 03131 06285 25685 25685 34564 42649 51844 70422	.09229 			۱۰ در	CA. .04268 .04257 .03357 00217	ë,	. 04320 . 04288 . 03388 00199
	AT I			GRADIENT INTERVAL	CA .03327 .03327 .04005 .04278 .04525 .04526 .04526 .03768 .03768	00052 AT1 0251 (C			GRADIENT INTERVAL	PH10 .91914 .69755 .57102	GRADIENT INTERVAL	PH10 .41163 .31383 .14322 05892
CA23B	747/1			3.36 GR	PH1C - 31637 - 49855 - 70951 - 1 28944 - 2 49324 14 59840 17 77 1 144 7 1 144	. 28308			3.35 GR	PHIC 7,13931 ,85653 ,54517 -1,62692	3.35 GR	PH1C -10.98800 .74617 .49892 2.65110
DATA -	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L ≈	BETAC - 02862 - 03681 - 03734 - 03660	_		9000 IN. XC 10000 IN. YC 7500 IN ZC	RN/L *	BETAO 10876 09956 10169	RN/L ₽	BETAO 04307 04527 02562
TABULATED SOURCE	ARC		# 1339, # 190,	0. 51/ 0	ALPHAC -5.190 -3.773 -2.866 -1.854 -1.854 -1.858 -1.90 -1.215 -1.90 -1.215 -1.90 -1.215 -1.226 -1.22			1339	0. 81/ 0	BETAC 02401 03533 04096	0. 82/ 0	BETAC 02455 03096 03794 00297
TABU		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	DZ 130.569 130.436 130.436 130.158 130.031 129.728 129.596 129.434 129.329 129.685 129.685		VCE DATA	2.FT. XMRP V. YMRP V. ZMRP	RUN NO	ALPHAC . 192 2.364 4.308 GRADIENT	RUN NO	ALPHAC 126 2.378 4.361 GRADIENT
MAR 76		REFERE	5500.0000 Si 327.7800 11 2348.0400 11				REFERENCE	5500.0000 SO 327.7800 IN 2348.0400 IN		D2 4.365 2.954 3.443		02 6.994 7.541 7.335
DATE 22 M			SREF = LREF = BREF = SCALE =					SREF LREF BREF SCALE				

22 MAR 76	TABULATED	SOURCE	, ,	CA23B	1000	CARRIER DATA)		800H008	PAGE 8) (08 OCT	E 51 17 75)
REFERE	REFERENCE DATA		14 - 160 (CAG.		1600			PARAMETRIC	DATA	
5500.0000 Si 327.7800 11 2348.0400 11	SG.FT. XMRP IN. YMRP IN. ZMRP	1339	.9000 IN. XC .9000 IN. YC .7500 IN ZC				BETA = RUDDER = 10RB = DY	0000.	STAB = ELEVON = DX = MACH =	-1.000 5.000 .000 .600
	RUN NO	. 83/ 0	RN/L =	3.36 GRA	GRADIENT INTERVAL	* 7.	.00/ 5.00			
02 9.751 9.637 9.522	ALPHAC 141 2.414 4.401 GRADIENT	BETAC 02355 03009 03349	BETAO 01931 02549 03304	PH1C -9.48584 71430 43541 2.26917	PH10 .18416 .17685 .18465	CA .04405 .04313 .03372 00218	CN - 12598 - 08963 - 24400 - 08160	CSL .00025 .00034 .00078	CLN 00207 00209 00203	
	RUN NO	0 /48 .0	RN/L H	3.35 GR/	GRADIENT INTERVAL	-5	.00/ 5.00			
DZ 14.752 15.063 15.188	AL PHAC 014 2 . 461 4 . 492 GRAD IENT	BETAC 02608 02807 03585	BETAO 02440 04108 03121	PHIC -62,46180 .65368 .47043	PH10 . 22804 . 28148 . 17167	CA . 04504 . 04331 . 03298 00260	CN 10357 .10662 .26906 .08278	CSL .00006 .00029 .00067	CLN 00226 00184 00227	
	RUN NO	0. 85/ 0	RN/L =	3.35 GR/	GRADIENT INTERVAL	, " - '5.	00/ 5.00			
02 29.536 29.860 29.902	ALPHAC 028 2.464 4.305 GRADIENT	BETAC 02407 03185 03897	BETAO 03133 04291 03159	PHIC -40,44000 .74080 .51892 9.85305	PH10 .29506 .29463 .17718	CA .04517 .04256 .03337 00263	CN 08486 .13397 .27668	CSL .00084 .00039 .00077 00003	CLN 00823 00823 00854 00007	
	RUN NO	0. 86/ 0	RN/L =	3.35 GR	GRADIENT INTERVAL	1. Š	00/ 5.00			
02 44.873 44.666 45.029	ALPHAC T.065 Z.496 H.342 GRADIENT	BETAC 02757 03315 03517	BETAO 02362 02345 01912	PHIC -23.10330 .76090 .46448 5.59553	PH10 .22277 .16089 .10662	CA . 04502 . 04211 . 03219	CN 08212 .15286 .30160	. 000057 . 00065 . 00067 . 00077	CLN 00248 00228 00227	
	RUN NO	0 . 87/ 0	RN/L =	3.34 GR	GRADIENT INTERVAL	٠	.00/ 5.00			
02 50.039 50.412 50.166	ALPHAC 106 2.490 4.334 GRADIENT	BETAC 02787 03319 03850	BETAO 01649 02879 02255	PH1C -14.70380 .76395 .50951 3.59220	PHI0 .15753 .19650 .12637	CA . 04554 . 04218 . 03179 00298	CN 06969 14912 30697 .30697	CSL .00031 .00095 .00109	CLN 00246 00236 00236 00250	

ت 52	1 75 1		5.000 5.000 600								
PAGE	9) (0B OCT	DATA	STAB ELEVON # DX MACH #		CLN 00257 00235 00290		CLN 00224 00232 00032		CLN 00213 00239 00224		CLN 00224 00267 00288 00015
	(ANH009)	PARAMETR1C			CSL .00034 .00071 .00034		CSL .00067 .00092 .00063		CSL .00050 .00084 .00065		. 00054 . 00059 . 00100 . 00011
			BETA RUDDER II IORB II IORB	10/ 5.00	CN 13093 . 04750 . 20362 . 08244	10/ 5.00	CN 14130 .06169 .21228	10/ 5.00	CN -,13342 .08098 .22484 .08101	00/ 5.00	CN 09068 .11734 .26552 .08111
	747/1 ATI OZSI (CARRIER DATA)			WAL = -5.00/	CA .04142 .04131 .03264 00213	NAL = -5.00/	. 04219 . 04123 . 03320 00197	NAL = -5.00/	CA . 04292 . 04220 . 03398 00189	WAL = -5.00/	CA . 04487 . 04242 . 03336 00251
	471 02S1 (C/			GRADIENT INTERVAL	PH10 .19725 .16156 .10141	GRADIENT INTERVAL	PH10 .21687 .21172 .10044	GRADIENT INTERVAL	PH10 .27336 .16081 .09991	GRADIENT INTERVAL	PH10 .14975 .18566 .08835
238				3.35 GR	PHIC 5.99245 .73241 .44328 -1.38154	3.35 GR/	PHIC -57.20780 .75188 .45919 13.82212	3.35 GR/	PHIC -12.10710 -68879 -45608 2.99138	3.35 GR/	PH:C -42.27900 .78716 .55338
SOURCE DATA - CA23B	ARC 14-120(CA23B)		339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC	RN/L #	BETAO 03081 02885 02166	FN/L =	BETAO 03073 03839 02139	RN/L ≈	BETAO 03827 02906 02133	RN/L =	BETAO 02110 03376 01885
TABULATED SOURC	ARC			0 /16 .0	BETAC 02879 03042 03350 00116	0. 92/ 0	BETAC 02295 03277 03474 00278	0. 93/ 0	BETAC02177030460343700288	0. 94/ 0	BETAC 02424 03487 04212 00408
TABU		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC ,274 2.380 4.334 GRADIENT	RUN NO	ALPHAC 015 2.498 4.339 GRADIENT	PUN NO	ALPHAC 101 2.534 4.322 GRADIENT	NOR NO	ALPHAC 027 2.539 4.365 GRADIENT
1AR 76		REFERE	5500,0000 S 327,7800 1 2348,0400 1		DZ 8.075 7.276 7.800		02 9.930 10.158 9.843		02 14.862 14.490 15.108		02 29.926 29.957 29.720
DATE 22 MAR 76			SREF "LREF" BREF "SCALE "								

CLN -.00222 -.00236 -.00257 -.00007

CSL .00056 .00102 .00076

CN -.09992 .12170 .30068

CA . 04452 . 04246 . 03148

PH10 .12774 .17258 .13191 .00156

PH1C -6.94078 .72242 .50205 1.64707

BETA0 -.01754 -.03095 -.02844 -.00245

BETAC -.02338 -.03033 -.07326 -.00337

ALPHAC -. 192 2.405 4.485 GRADIENT

DZ 44.465 44.798 44.826

3.34 GRADIENT INTERVAL = -5.00/ 5.00

RN/L =

RUN NO. 95/ 0

53	(57)		-1.000 5.000 .000			1 75)		5.000 5.000 .000 .600						
PAGE	(08 00	DATA	STAB # ELEVON # DX # MACH #		CLN 00261 00229 00264) (08 OCT	DATA	STAB = ELEVON = DX = MACH =		CLN 00328 00309 00276		CLN 00284 00298 00260		CLN 00287 00272 00239
	(ANH009)	PARAMETRIC	000.8		CSL . 00008 . 00038 . 00080	(ANH010)	PARAMETRIC	000. 8.000		. 00021 . 00015 . 00074 . 00013		CSL .00017 .00055 .00088		CSL .00007 .00036 .00022
			BETA RUDDER RIORB RODE RIORB R	00.5 /00.	CN 07771 . 14746 . 30227 . 08503			BETA = RUDDER = 10RB = DY	.00/ 5.00	CN 04417 .12376 .28520 .07955	00/ 5.00	CN 07123 .14056 .30546	-5.00/ 5.00	CN 04610 .15062 .32557 .08149
	(CARRIER DATA)			a f	CA . 04539 . 04194 . 03145 00299	(CARRIER DATA)			r r	CA . 04260 . 04108 . 03198 00254	ı, RÇ	CA . 04258 . 04149 . 03223	н	CA .04381 .04200 .03249 00241
	AT1 0251 (CA			GRADIENT INTERVAL	PH10 .17333 .13939 .12503 01095	AT1 02S1 (C/			GRADIENT INTERVAL	58112 .50184 .39704 04435	GRADIENT INTERVAL	PH10 0.48535. 18861. 18991.	GRADIENT INTERVAL	PH10 .27412 .18060 .13707
38	747/1			3.35 GRA	PHIC -20.97440 .73404 .52481 5.04293	747/1			3.39 GR	PHIC 15.98680 .99677 .52838	3.38 GR	PH1C -9.14115 .99200 .52480	2.37 GF	PHIC -10.91640 .87350 .48698 2.59261
URCE DATA ~ CA238	14-12J(CA23B)		.9000 IN. XC .0000 IN. YC	RN/L .	BETAO 02435 02537 02682 00054	14-120(CA23B)		39.9000 IN. XC .0000 IN. YC 90.7500 IN ZC	RN/L =	BE TAO 08097 08924 08411	RN/L =	BETAO 03516 03365 04055	RN/L =	BETAO 03806 03222 02935
S	ARC		1339). 96/ C	BETAC 03005 03265 04020	ARC		= 1339 = 190	0. 101/ 0	BETAC 03786 04006 03935 00037	NO. 102/ 0	BETAC 03319 04042 03977	NO. 103/ 0	BETAC 03442 03607 03720
TABULATED		REFERENCE DATA	J.FT. XMRP V. YMRP V. ZMRP	RUN NO	ALPHAC 078 2.550 4.393 GRADIENT		NCE DATA		RUN NO	ALPHAC .132 2.303 4.270 GRADIENT	N NOR	ALPHAC 206 2.335 4.346 GRADIENT	RUN	ALPHAC 178 2.367 4.381 GRADIENT
MAR 75		REFEREN	5500.0000 50. 327.7800 1N 2348.0400 1N		02 50.555 50.407 50.452		REFERENCE	5500.0000 Si 327.7800 13 2348.0400 11		02 6.742 7.349 7.463		02 10.009 10.088 10.447		02 15.028 14.812 15.043
DATE 22 M			SREF = BREF = SCALE =					SREF = LREF = BREF = SCALE =						

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80)	DATA	STAB = ELEVON = DX =		CLN 00283 00293 00293		CLN 00283 00298 00277 .00001		CLN 00298 00298 00292	80)	DATA	STAB = ELEVON = DX = MACH =		CLN 00183 00195 00185
(ANH010)	PARAMETR1C			CSL .00034 .00020 .00047		CSL .00025 .00040 .00023		CSL .00043 .00066 .00066	(ANH011)	PARAMETRIC	0000.		CSL .00027 .00057 .00070
		BETA # RUDDER # IORB # DY	.00/ 5.00	CN 00575 .20253 .36782 .08281	00/ 5.00	CN .01639 .23034 .39509 .08345	00/ 5.00	CN .01979 .23916 .40428	_		BETA RUDDER TORB DY	00/ 5.00	CN 09010 09687 25917
(CARRIER DATA)			ıı TÜ	CA . 04479 . 04253 . 03232 00270	RVAL = -5.00	CA .04522 .04226 .03216	RVAL = -5.00	CA .04534 .04209 .03156 00296	(CARRIER DATA)			TVAL = -5.00/	CA . 04599 . 04380 . 03336 00296
AT1 0251 (C			GRADIENT INTERVAL	PH10 .1454! .13985 .1076!	GRADIENT INTERVAL	PHIO .22554 .18116 .10897	GRADIENT INTERVAL	PHIO . 22512 . 13458 . 07855	AT1 02S1 (C			GRADIENT INTERVAL	PH10 1.58291 1.05370 .75986 19622
1747 (85)			3.36 GR	PHIC -17.50900 .96584 7.52247	3.35 GR	PHIC -16.47020 .91470 .50917 3.87374	3.34 GR	PHIC -24.19930 -84657 52230 5.72305	747/1			3.34 GR	PHIC 26.60780 77746 .46360 -6.30222
14-120(CA23B)		3.9000 IN. XC .0000 IN. YC .7500 IN ZC	RN/L =	BETAO 02025 02508 02305	FN/L =	BETAO -,03145 -,03268 -,02344 -,00167	RN/L =	BETAO 03157 02435 01688	14-120(CA23B)		1.9000 IN. XC 1.7500 IN. YC	RN/L .	BETAO 11075 10941 10860
ARC		1339	0. 104/ 0	BETAC 03396 03978 04015	0. 105/ 0	BETAC 03296 03866 03932 00144	0. 106/ 0	BETAC 03425 03651 04021 00131	ARC		1339	0. 1111 0	BETAC 02341 03080 03447 00264
	REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC -,108 2.360 4.407 GRADIENT	RUN NO	ALPHAC 111 2.422 4.429 6RADIENT	RUN NO	ALPHAC 076 2.472 4.415 GRADIENT		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	PCN NO	ALPHAC . 047 2.270 4.264 GRADIENT
	REFERE	5500.0000 8 327.7800 1 2348.0400 1		02 29.734 30.254 29.860		02 44.868 45.183 45.129		DZ 50.418 50.480 50.477		REFERE	5500.0000 S 327.7800 1 2348.0400 1		02 3.151 3.118 3.528
		SREF = LREF = BREF = SCALE =									SREF # BREF # SCALE #		

55	T 75)		-1.000 5.000 .000 .600										
PAGE	1) (08 OC.	DATA	STAB = ELEVON = DX = MACH =		CLN 00196 00195 00211		CLN 00209 00214 00215		CLN 00255 00227 00224		CLN 00224 00233 000236		CLN -,00219 -,00213 -,00234 -,00003
	(ANH011)	PARAMETRIC	0000		CSL .00058 .00044 .00065		CSL .00019 .00040 .00020		CSL .00006 .00113 .00075		CSL .00049 .00057 .00057		CSL .00031 .00056 .00090
			BETA * RUDDER = 10R8 = 0Y	.00.7 5.00	CN 09333 .12282 .27090	.00/ 5.00	CN 08222 .12474 .28840	00/ 2.00	CN 07247 .13493 .29452	.007 5.00	CN 06548 .15678 .32634 .08501	5.00/ 5.00	CN 04599 .16998 .34501 .08534
	(CARRIER DATA)			# C	CA . 04548 . 04322 . 03311	ر ا	CA .04599 .04316 .03217 00298	ERVAL = -5.1	CA .04646 .04264 .03193	# ሺ	CA . 04567 . 04199 . 03011 00328	"	CA .04565 .04120 .02879 00362
	AT1 0251 (CA			GRADIENT INTERVAL	PH10 1.69918 1.00897 20407	GRADIENT INTERVAL	PH10 1.64035 1.03445 77832	GRADIENT INTER	PH10 1.61977 1.03828 .81656 18339	GRADIENT INTERVAL	PHIO 1.68668 .99348 .79100 19773	GRADIENT INTERVAL	PH10 1.52576 .96551 .80359 15955
38	11/24/			3.35 GR	PHIC -8.21007 .74906 .50386 2.06044	3.35 GR/	PHIC -12.50350 .79807 .50052 2.94672	3.35 GR	PHIC -37,75920 .80362 .50413 8.91129	3.35 GR	PHIC -8.53365 .73812 .51832	3.34 GR	PHIC -11.09150 .81448 .49958 2.59569
. DATA - CA238	14-120(CA23B)		338.9000 IN. XC .0000 IN. YC 190.7500 IN ZC	RN/L =	BETAO 11970 10988 11583	£N/L ≈	BETAO 11596 11241 1246	RN/L =	BETAO 11731 11444 11849	RN/L =	BETAO 11781 10938 11499	RW/L =	BETAO 10711 10582 11672 00202
TABULATED SOURCE DATA	ARC		n n n	0. 112/ 0	BETAC 02451 03117 03785	0. 113/ 0	BETAC 02656 03276 03856	0. 114/ 0	BETAC 03158 03385 03861 00156	0. 115/0	BETAC 02555 03132 04008 00288	to. 116/0	BETAC 02629 03335 00272
TABUL		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC - 170 2.385 4.257 GRADIENT	RUN NO	ALPHAC 120 2.353 4.419 GRADIENT	RUN NO	ALPHAC 041 2.414 4.392 GRADIENT	RUN NO	AL PHAC 177 2 . 432 4 . 435 GRADIENT	RUN NO	ALPHAC 134 2.347 4.450 GRADIENT
AR 76		REFERE	5500.0000 SC 327.7800 11 2348.0400 11		02 7.547 7.199 7.175		02 9.781 9.781 9.491		02 14.874 14.967 14.923		D2 29.907 29.803 29.693		DZ 44.786 45.057 44.45
DATE 22 MAR			SREF = LREF = BREF = SCALE =				. -	B					

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<u>.</u>	STAB # ELEVON # DX # MACH #		CLN 00192 00202 00233		CLN 00236 00237 00231		CLN 00233 00236 00223 00002
			CSL 00009 .00063 .00015		CSL .00005 .00081 .00052		CSL .00023 .00057 .00063
	BETA RUDDER RIORB ROY	-5.00/ 5.00	CN 11852 .07952 .22793	00/ 5.00	CN 10316 .09418 .25339 .07974	00/ 5.00	CN 11163 .10393 .26779
			CA .04372 .04195 .03289 00246	GRADIENT INTERVAL = -5.00/ 5.00	CA . 04426 . 04237 . 03210 00266	GRADIENT INTERVAL = -5.00/ 5.00	CA . 04426 . 04245 . 03164
		GRADIENT INTERVAL =	PHIO 1.07055 .981762 .59669	ADIENT INTE	PH10 1.05177 .77121 .55069	ADIENT INTE	PH10 1.04900 77720 .58516
		3.35 GR	PHIC 32.59070 .66203 .50466 -7.73165	3.34 GR	PHIC -47.68780 .78115 .48964 11.04783	3.34 GR	PH1C -9.45049 ,78898 ,48077 2.23580
	3000 IN. XC 3000 IN. YC 7500 IN ZC	RN/L *	BETAO 11185 11753 10642	FN/L =	BETAO 11292 11194 09920	RN/L =	BETA0 11073 11282 10592
	1339.9000	121/0	BETAC02403028690380100321	1. 122/ 0	BETAC 02811 03271 03798	1. 123/ 0	BETAC 02594 03357 03737
AEFENCE UAIA	T. XMRP	RUN NO.	ALPHAC .038 .411 4.319 GRADIENT	RUN NO.	ALPHAC 026 2.399 4.448 GRADIENT	RUN NO.	ALPHAC -, 156 2.439 4.458 GRADIENT
אבי באבי	5500.0000 \$0.FT. 327.7800 IN. 2348.0400 IN.		02 3.209 3.176 3.398		02 7.586 7.752 7.261		0.2 10.180 9.988 10.110

CT 75)		5.000 5.000 .000
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(ANHD13) (08 OCT 75	DATA	STAB ELEVON DX MACH
(ANHD)	PARAMETRIC DATA	
•		BETA RUDDER 10RB DY
ARC 14-120(CA23B) 747/1 ATI 02SI (CARRIER DATA)		
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1 02		
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A23B)		χΣυ
2010		ZZZ
ARC 14-1		1339-9000 IN. XC .0000 IN. YC 190.7500 IN ZC
		 11 H M
	4	XMRP YMRP ZMRP
	REFERENCE DATA	SQ.FT. IN. IN.
	REFER	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.
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		SREF : LREF : BREF : SCALE :

	CLN 00061 00100	10000
	. 000046	01000.
30/ 5.00	03381 14201 .30558	COCOO.
NTERVAL = -5.00	. 04457 . 04301 . 03361	
RADIENT INTE	95072 . 95072 . 72488 . 50356	P. 1001.1
3.34 GR	PH1C 6.10814 .58366 .29224	- 1 . Secon /
RN/L =	BETAO -, 10041 -, 10209 -, 08994	, touch
0. 131/ 0	BETAC 01363 02297 02211	~ . 00404
RUN NO	ALPHAC .127 2.255 4.338	CHACIEN
	52 3.093 3.006 3.460	

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TABULATED SOURCE DATA - CA23B

(ANH013) (08 OCT 75) ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

	5.000 8.000 .000 .000 .600										
DATA	STAB = ELEVON = DX = MACH =		CLN 00075 00065 00065		CLN 00104 00079 00077		CLN 00137 00101 00096		CLN 00219 00211 00230 00002		CLN 00232 00234 00246
PARAMETRIC			CSL .00005 .00053 .00070		CSL .00040 .00028 .00038		CSL 00035 .00034 .00036		CSL .00013 .00022 .00061		CSL .00028 00002 .00072
	BETA RUDDER RIORB ROY	00/ 5.00	CN 04333 .16157 .32629 .08203	00/ 5.00	CN 04647 .17707 .33533 .08294	-5.00/ 5.00	CN 02817 .18662 .35562 .08284	-5.00/ 5.00	CN .01379 .22014 .37720	5.00/ 5.00	CN .02785 .24163 .40465 .08341
REFERENCE DATA		RVAL = -5.00/	CA .04470 .04337 .03403 00229	RVAL = -5.00/	CA .04470 .04335 .03389	п	CA .04547 .04376 .03346 00251	ŧ	CA .04601 .04341 .03356 00271	,	CA .04596 .04292 .03224 00296
		GRADIENT INTERVAL	PH10 1.00523 .68905 .53220 10584	GRADIENT INTERVAL	PHIO . 99648 . 60332 . 49039	GRADIENT INTERVAL	PHIO . 93377 . 66058 . 50485	GRADIENT INTERVAL	PH10 . 92147 . 63439 . 54824	GRADIENT INTERVAL	PH10 .83074 .63200 .48762 07602
		3.34 GR	PHIC -6.02567 .45777 .26739 1.44473	3.33 GR	PHIC -4.11140 .44820 .28859	3.35 GR	PH1C -6.58827 .49354 .30774	3.35 GF	PHIC -24.55400 72761 .46506 5.81839	3.35 66	PH1C -30,15350 .77706 .46476 6.98692
	339.9000 IN. XC .0000 IN. YC 90.7500 IN ZC	RN/L *	BETAO 10535 09890 09513	FN/L =	BETAO 10377 08719 08783	RN/L =	BETAO 09798 09538 09119	RN/L =	BETAO 09840 09207 09852	RN/L =	BETAO 08807 03149 08813
	11 H H	0. 132/ 0	BETAC 01465 02036 00129	0. 133/ 0	BETAC 01705 01882 02200	O. 134/ O	BE1AC 02211 02383 00333	10. 135/ 0	BETAC 02859 03091 03562	40. 136/ 0	BETAC 02818 03322 03625
	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 139 2.360 4.367 GRADIENT	RUN NO.	AL PHAC 237 2 .407 4 .371 GRAD IENT	RUN NO	AL OHAC 191 2.411 4.441 GRADIENT	RUN NO	ALPHAC 063 063 2.435 4.393 GRADIENT	RUN NO	ALPHAC 049 2.450 4.474 GRADIENT
REFERE	5500.0000 S 327.7800 1 2348.0400 1		02 7.217 7.234 7.262		02 10.116 9.960 9.890		02 15.175 14.756 15.038		02 30, 192 29, 830 29, 948		DZ 44.708 44.452
	SREF = LREF = BREF = SCALE =										

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DATE 22	22 MAR 76	TABULATED	ហ	OURCE DATA - CA	CA23B					PAGE)E 58
			ARC	14-120(CA23B)	3B) 747/1 AT1	0251	(CARRIER DATA)		(ANH013	3) (08 00.	, 27 T
	REFER	REFERENCE DATA							PARAMETR 1C	DATA	
SREF "LREF" #BREF SCALE "	5500.0000 327.7800 2348.0400	SO.FT. XMRP IN. YMRP IN. ZMRP	1339.9 10.7	. 9000 IN. XC . 0000 IN. YC . 7500 IN ZC				BETA # RUDDER # 10RB # 0Y	.000 .000 .000 .000	STAB ELEVON = DX MACH =	5.000 5.000 .000
		RUN NO.	137/ 0	RN/L =	3.35 GR	GRADIENT INTERVAL	WAL = -5.00/	00/ 5.00			
	02 50.164 50.275 50.038	ALPHAC 057 2.433 4.464 GRADIENT	BETAC 02860 03271 03731	BETAO 09393 09205 08744 .00141	PHIC -26.61570 .77048 .47934 6.17858	PH10 .88566 .63379 .48464 08916	CA .04580 .04268 .03172 00305	CN . 02725 . 24490 . 41281 . 08536	CSL .00048 .00069 .00083	CLN 00234 00238 00252	•
			ARC	14-120(CA23B)	747/1	AT1 0251 (CA	(CARRIER DATA)		(ANHO14	4) (08 OCT	(57 13
	REFER	REFERENCE DATA							PARAME TRIC	DATA	
SREF = LREF = BREF = SCALE =	5500.0000 327.7800 2348.0400	SQ.FT. XMRP IN. YMRP IN. ZMRP	1339.9 10.0	9000 IN. XC 0000 IN. YC 7500 IN ZC				BETA = RUDDER = 10RB = DY		STAB ELEVON BOX	5.000 5.000 10.000
		RUN NO.	141/0	RN/L =	3.33 GR	GRADIENT INTERVAL	" .5	00/ 5.00			
	02 3.324 3.528	AL PHAC 2.292 4.239 GRADIENT	BETAC 01280 01529	BETAO 06053 05714	PH1C .31988 .20685 05808	PH10 .42703 .32308 05341	CA . 04176 . 03235 00483	CN . 15480 . 32110 . 08545	CSL .00029 .00032	CLN .00010 .00011	
		RUN NO.	. 142/ 0	RN/L =	3.32 GR	GRADIENT INTERVAL	NAL = -5.00/	00/ 5.00			
	02 7.340 7.097	ALPHAC 1.933 4.300 GRADIENT	BETAC 01416 01526 00046	BETAO 06404 06314 .00038	PHIC .41998 .20349	PH10 .45795 .35723	CA .04345 .03277 00451	CN . 14324 . 33945 . 08287	CSL 00022 .00029 .00021	CLN 00005 .00016	
		RUN NO.	. 143/ 0	RN/L =	3.32 GA	GRADIENT INTERVAL	in *	.00/ 5.00			
	DZ 10.137 9.825	ALPHAC 1.946 4.403 GRADIENT	BETAC 00951 01435 00197	BETAC 05199 05694 00202	PHIC .28014 .18696 03792	PH10 . 36992 . 31845 02095	CA .04395 .03275 00456	CN . 14968 . 35446 . 08334	CSL 00004 .00037 .00016	CLN .00020 .00015	

 6	(27)		5,000 5,000 10,000								·
PAGE	1) (08 OCT	DATA	STAB # ELEVON # DX # MACH #		CLN 00045 00048 00001		CLN 00201 00194 .00003		CLN 00229 00216		CLN 00237 00226 .00005
	(ANHO 14)	PARAMETRIC	000.		CSL .00024 .00020 00002		CSL .00034 .00060		CSL .00079 .00037		CSL .00040 .00098 .00025
	ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)		BETA = RUDDER = 10RB = DY	0/ 5.00	CN .16172 .37028 .08662	0/ 5.00	CN 19899 39840 08326	00.5 /0	CN .20952 .42202 .08737	00/ 5.00	CN . 22438 . 42391 . 08376
				VAL = -5.00/	CA .04431 .03282 00477	/AL = -5.00/	CA .04433 .03255 00492	NAL = -5.007	CA .04415 .03160 00516	VAL = -5.00/	CA .04411 .03154 00527
				GRADIENT INTERVAL	PH10 ,44604 ,28556 -,06635	GRADIENT INTERVAL	PH10 .45433 .27580 07454	GRADIENT INTERVAL	PH10 .42896 .29070 05684	GRADIENT INTERVAL	PH10 .39158 .29230 -,04135
38				3.31 GRA	PHIC .46894 .26641 03412	3.31 GRA	PH1C .82332 .41164 17189	3.30 GRA	PH1C .83988 .42924 16883	3.30 GR/	PHIC .89046 .43278 19214
TABULATED SOURCE DATA - CA23B			000 IN. XC 000 IN. YC 500 IN ZC	RN/L =	BETA0 05263 05095	RN/L =	BETAO 06409 04940 .00613	RN/L =	BETAO 06037 05230 .00332	RN/L =	BETAO 05552 05247 .00128
			1339.9000 10000 190.7500	0 /441 .	BETAC 01610 02033	0 /5+1 .	BETAC -,02870 -,03153 -,00118	0 /9+1 .0	BETAC 02928 03316	0. 147/ 0	BETAC 03183 03343 00067
		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 1.969 4.376 GRADIENT	RUN NO.	ALPHAC 1.997 4.392 GRADIENT	RUN NO.	ALPHAC 1.998 4.430 GRADIENT	RUN NO.	ALPHAC 2.049 4.431 GRADIENT
DATE 22 MAR 76		Nederland	SREF = 5500.0000 SQ.F LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125		DZ 14.831 14.775		DZ 30.007 59.873		DZ 44.854 44.891		02 50.387 50.182

TABULATED SOURCE DATA - CA238

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(27 T		5.000 5.000 10.000 .600												
5) (08 OCT	DATA	STAB == ELEVON == DX == MACH ==		CLN 00030 00062 00016		CLN 00048 00065 00007		CLN 00082 00077		CLN 00234 00242		CLN 00261 00261 00000		CLN 00282 00265
CANHO15	PARAMETR1C	8		CSL .00023 .00010		CSL .00040 .00026 .00026		CSL 00031 .00011		CSL .00083 .00085		CSL .00047 .00113		CSL .00059 .00061
-		BETA ** RUDDER ** 10RB ** DY **	5.00/ 5.00	CN .15563 .31585 .08210	.00/ 5.00	CN .13504 .34009 .08454	00/ 5.00	CN .15591 .36145 .08502	.007 5.00	CN . 18913 . 39280 . 08332	.007 5.00	CN .20859 .40901 .08297	.007 5.00	CN .20933 .41126 .08558
ATI O2SI (CARRIER DATA)			U	CA . 04093 . 03104 00506	ר ה נט	CA . 04238 . 03070 00482	ָ ֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֡֡֝	CA .04316 .03110 00499	H T	CA . 04394 . 03152 00508	i,	CA . 04392 . 03149 00514	ř.	CA . 04398 . 03199 ~. 00508
			GRADIENT INTERVAL	PHI0 .31121 .26196 02523	GRADIENT INTERVA	PH10 .29782 .26759 01246	GRADIENT INTERVAL	PH10 .25921 .22228 01528	GRADIENT INTERVAL	PHIC .33936 .24052 04044	GRADIENT INTERVAL	PH10 .26416 .23069 . .01386	PH10 .26268 .23415 01210	
38) 747/1 AT!			3.30 GR	PHIC .36584 .28710 04035	3.29 GR	PHIC .45446 .27085 07571	3.29 GR	PHIC .56414 .28886 11388	3.29 GR	PHIC .84898 .45306 6197	3.29 GR	PHIC .93043 .46906 19100	3.29 GR	PH1C .98066 .48742 20906
ARC 14-120(CA23B)	REFERENCE DATA	1.9000 IN. XC 1.0000 IN. YC 1.7500 IN ZC	RN/L =	BETAO 05552 05594 00021	RN/L =	BETAO 05238 05759	RN/L =	BETA0 04574 04780 00085	RN/L =	BETA0 05990 05189	RN/L *	BETAO 04639 04968 00136	RN/L =	BETAO 04601 05004 00171
		= 1339	0. 151/ 0	BETAC 01539 02184 00330	NO. 152/ 0	BETAC 01620 02110 00202	0, 153/ 0	BETAC 02047 02265 00090	0, 154/ 0	BETAC 03036 03550 00210	0. 155/ 0	BETAC 03319 03648 00136	0. 156/ 0	BETAC 03450 03719 00114
		SO.FT. XMRP IN. YMRP IN. ZMRP		ALPHAC 2.410 4.362 GRADIENT		ALPHAC 2.043 4.469 GRADIENT	RUN NO	ALPHAC 2.079 4.497 GRADIENT	RUN NO	ALPHAC 2.049 4.493 GRADIENT	RUN NO	ALPHAC 2.044 4.460 GRADIENT	RUN NO	ALPHAC 2.016 4.375 GRADIENT
	REFERE	5500.0000 S 327.7800 1 2348.0400 1		02 7.261 7.540		02 9.896 10.215		02 14.806 14.750		DZ 30.131 30.087		DZ 44.833 45.102		02 50.292 50.425
		SREF # LREF # BREF = SCALE =												

0CT 75 1		5.000 5.000 20.000 .600																
600	DATA	STAB # ELEVON # DX # MACH #		CLN .00001 00032 00018		CLN 00045 00049 00002		CLN 00042 00054 00005		CLN 00089 00098		CLN 00223 0028		CLN 00252 00258 00002				
CANHO16	PARAMETR1C	.000 .000 6.000 .000		CSL .00027 .00036 .00005		CSL .00029 .00041		CSL .00024 .00034 .00004		CSL .00043 00006 00023		CSL .00053 .00090		CSL .00058 .00074				
		BETA RUDDER RIDORB RIDORB RIDORB	00/ 2.00	CN . 19142 . 34708 . 08287	00/ 5.00	CN .16626 .37148 .08348	00/ 2.00	CN .16541 .37705 .08479	00/ 5.00	CN .19475 .37358 .08324	00/ 2.00	CN .20461 .40806	00/ 2.00	CN . 22056 . 42714 . 08470				
(CARRIER DATA)			i,	CA .04018 .03080 00500	L * -5.	CA . 04287 . 03083 00490	ا ا ح	CA . 04380 . 03139 00497	" ស្មី	CA . 04369 . 03320 -,00488	-5.	CA .04455 .03191 -,00519	_ከ	CA .04447 .03140 00536				
0251			GRADIENT INTERVAL	PH10 .23155 .25269 .01125	GRADIENT INTERVAL	PH10 .27945 .21866 02473	GRADIENT INTERVAL	PH10 .29275 .20939	GRADIENT INTERVAL	PH10 .25025 .00211	GRADIENT INTERVAL	PH10 .26398 .16541 04046	GRADIENT INTERVAL	PH10 .28957 .21740 02959				
B) 747/1 AT1			3.29 GRA	PHIC .27527 .23+31 02180	3.28 GRA(PH1C .44088 .25198 07683	3.31 GRA	PHIC .41286 .25891 06168	3.30 GR/	PHIC .49453 .32759 07770	3.31 GR	PHIC .83991 .42727 16939	3.30 GR	PHIC .91065 .47457 17881				
ARC 14-120(CA23B)		.9000 IN. XC .0000 IN. YC	RN/L =	BETAO 03333 04504 00623	RN/L =	BETAO 03938 03932	RN/L =	BETAO 04140 03759	RN/L =	BETAO 03531 04432	RN/L =	BETAO 03728 02971	RN/L =	BE1AO 0+071 03905 .00068				
ARC		1339	1339	1339	1339	1339	0. 161/ 0	BETAC 01182 01773 00315	0. 162/ 0	BETAC 01557 01969 00168	0. 163/ 0	BETAC 01433 02025 00237	0. 164/ 0	BETAC 01853 02454 00280	0. 165/ 0	BETAC 02941 03310 00151	0. 166/ 0	BETAC 03180 03674 00202
	REFERENCE DATA	50.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 2.461 4.340 GRADIENT	RUN NO	ALPHAC 2.024 4.482 GRADIENT	RUN NO	ALPHAC 1.989 4.485 GRADIENT	RUN NO	AL PHAC 2.147 4.296 GRADIENT	RUN NO	ALPHAC 2.006 4.442 GRADIENT	RUN NO	ALPHAC 2.001 4.440 GRADIENT				
I	REFEREN	5500.0000 SC 327.7800 11 2348.0400 11		DZ 2.997 3.241		7.114 7.110		02 10.110 9.502		02 14.885 14.669		02 29.970 29.738		DZ 44.740 44.620				
!		M 11 M																

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TABULATED SOURCE DATA - CA238

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S) (08 OC	DATA	STAB = ELEVON = DX = MACH =		CLN 00250 00263	8 0)	DATA	STAB = ELEVON = DX = MACH =		CLN 00113 00134 00010		CLN 00138 00131		CLN 00167 00148		CLN 00279 00297 00008
(ANH016)	PARAMETRIC	000.		CSL .00077 .00097 .00008	(ANHO17)	PARAMETRIC	000. 000. 000. 000.		CSL .00006 .00028		CSL .00036 00002		CSL 00007 .00038		CSL .00089 .00057 00013
•		BETA RUDDER BIONB	.007 5.00	CN . 21671 . 43514 . 08753	-		BETA RUDDER IORB DY	00/ 5.00	CN . 16281 . 33966 . 08468	.00/ 5.00	CN . 14657 . 34303 . 08262	.00/ 5.00	CN . 1587! . 35705 . 08448	.00/ 5.00	CN . 18417 . 39099 . 08608
CARRIER DATA			# &	CA .0424 .03108 00528	(CARRIER DATA)			.5-	CA . 03963 . 02832 00541	1 1	CA . 04116 . 02951 00490	# C	CA . 04199 . 03027 00499	ا. ئ	CA . 04298 . 03082 00506
AT1 0251 (C			GRADIENT INTERVAL	PH10 .25207 .21516 01479	0251			GRADIENT INTERVAL	PHI0 .29786 .17796 05741	GRADIENT INTERVAL	PH10 .25469 .20369	GRADIENT INTERVAL	PH10 .25118 .19334 02464	GRADIENT INTERVAL	PH10 .22154 .23681 .00636
338) 747/1			3.30 GF	PHIC .89420 .47518 16791	3B) 747/1 AT!		·	3.31 GR	PHIC .55574 .38562 08146	3.32 GR	PH'C .65824 .36783 13896	3.33 GR	PHIC .77345 .37080 17151	3.32 GR	PHIC .98158 .54644 18111
14-120(CA23B)		1339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC	RN/L =	BETAO 03538 03895 00143	14-120(CA23B)		1339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC	RN/L =	BETAO 05280 03816	RN/L =	BETAO 04476 04339	RN/L .	BETAO 04430 04124	RN/L *	BETAO 03893 05055 00484
ARC		n 11 11	10. 167/ 0	BETAC 03094 03710 00247	ARC		H H H	0. 171/ 0	BETAC 02250 02964 00342	0. 172/ 0	BETAC 02424 02801 00159	0. 173/ 0	BETAC 02756 02838 00035	0. 174/ 0	BETAC 03417 04190 00322
	REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 1.983 4.478 GRADIENT		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 2.320 4.409 GRADIENT	RUN NO.	ALPHAC 1.989 4.367 GRADIENT	RUN NO	ALPHAC 2.042 4.390 GRADIENT	RUN NO	AL PHAC 1.994 4.397 GRAD I ENT
	REFERE	5500.0000 327.7800 2348.0400 ,0125		02 50.218 50.509		REFERE	5500.0000 9 327.7800 1 2348.0400 1		02 7.409 7.682		02 10.200 9.876		02 14.980 14.840		02 30.168 29.810
		SREF = LREF = BREF = SCALE =					SREF "LREF "BREF "SCALE "								

DATE 22 MAR 76	TABULATED	Ś	OURCE DATA - CA23B	38					ū	
		ARC	14-120(CA23B)	1/247	AT1 0251 (CA	(CARRIER DATA)		(ANH017)	80)	OCT 75)
REFERE	REFERENCE DATA							PARAMETR1C	: DATA	
SREF = 5500.0000 SILVEF = 327.7800 BREF = 2348.0400 SCALE = .0125	SO.FT. XMRP IN. YMRP IN. ZMRP	1339	.9000 IN. XC .0000 IN. YC I.7500 IN ZC				BETA BRUDDER BOY BOY	.000 .000 .000 .000	STAB = ELEVON = DX = MACH =	5.000 5.000 20.000 .600
	RUN NO.	0 /5/1	RN/L =	3.32 GRA	GRADIENT INTERVAL	κ. Γυ	.00/ 5.00			
DZ 44.854 45.244	ALPHAC E.109 4.417 GRADIENT	BETAC 03555 04035 00208	BETAO 03866 04473 00263	PHIC .95560 .52387 13141	PH10 .21860 .20806 00457	CA .04303 .03088 00526	CN . .21618 .41179	CSL .00021 .00010 00005	CLN 00280 00283	
	RUN NO	0. 176/ 0	RN/L =	3.32 GRA	GRADIENT INTERVAL	VAL = -5.00	0/ 5.00			
DZ 50.344 50.595	ALPHAC 2.118 4.352 GRADIENT	BETAC 03598 03800 00090	BETAO 03588 04182 00266	PHIC .97366 .50080 21167	PH10 .20281 .19570 00319	CA . 04304 . 03131 00525	CN .21421 .40634 .08601	CSL .00073 .00075	CLN 00295 00276 .00009	
		ARC	14-120(CA23B)	1747/1	AT1 0251 (CA	(CARRIER DATA)		(ANHO 18)	80)	001 75)
REFER	REFERENCE DATA							PARAMETRIC	C DATA	
SREF = 5500.0000 LREF = 327.7800 BREF = 2348.0400 SCALE = .0125	SO.FT. XMRP IN. YMRP IN. ZMRP	. 1339,9000 . 0000 . 190.7500	9000 IN. XC 9000 IN. YC 7500 IN ZC				BETA RUDDER BIONB BOY	. 000 . 000 6. 000 10. 000	STAB # ELEVON # DX # MACH #	
	RUN NO.	0. 181/0	RN/L =	3.32 GR	GRADIENT INTERVAL	n rų	00/ 5.00			
02 3.378 3.590	ALPHAC 2.472 4.405 GRADIENT	BETAC 05330 04626 .00364	BETAO 04653 03533	PHIC 1.23581 .63218 32765	PH10 .32090 .196:8 06449	CA .04110 .03183 00479	CN .17094 .32447 .07939	CSL .00571 .00667 .00050	CLN 00767 00741 .00014	
	RUN NO	0. 1827 0	RN/L =	3.31 GR	GRADIENT INTERVAL		00/ 5.00			
02 7.711 7.202	ALPHAC 2.009 4.378 GRADIENT	BETAC 04982 03609	BETAO 03557 04085 00223	PHIC 1.42106 .47278 40024	PHIO .25146 .22910 00944	CA .04261 .03186 00454	CN . 14843 . 34335 . 08227	. 00501 . 00584 . 00035	CLN 00674 00553 .00051	
	RUN NO	0. 183/ 0	₽ T/Nd	3.31 GA	GRADIENT INTERVAL	1.	.00/ 5.00			
D2 9.911 10.102	ALPHAC 2.005 4.475 GRADIENT	BETAC 04669 02745 .00779	8ETAO 04412 02597 00735	PHIC 1.33418 .35177 39775	PH10 .31295 .14366 06854	CA . 04294 . 03174 00453	CN . 15579 . 35870 . 0821 6	CSL .00473 .00471 00003	CLN 00612 00412	

65	75)		5.000 5.000 .000												
PAGE	9) (08 OCT	DATA	STAB = ELEVON * DX = MACH =		CLN 00577 00345		CLN 00506 00250		CLN 00352 00058		CLN .00143 .00369		CLN .00130 .00180		CLN .00056 .00103
	(ANH019)	PARAMETR1C	.000 .000 8.000 10.000		CSL .00579 .00683		CSL .00544 .00632 .00040		CSL .00530 .00546 .00006		CSL .00223 .00240 .00007	-	CSL .00069 .00167 .00042		CSL .00120 .00139
			BETA = RUDDER = 10RB = DY	.00/ 5.00	CN .14820 .30866 .08124	.00/ 5.00	CN .13896 .31636 .08087	00/ 5.00	CN .13431 .33436 .08166	00/ 5.00	CN .17602 .37672 .08398	.007 5.00	CN .20153 .39516 .08183	.00/ 5.00	CN . 20595 . 39639 . 08203
	(CARRIER DATA)			₹.	CA . 04060 . 03112 00480	ا ا	CA . 04129 . 03143 00450	# .5	CA . 04205 . 03155 00429	3VAL = -5.0	CA . 04334 . 03249 00454	ii.	CA . 04382 . 03204 00498	ř.	CA . 04375 . 03262 00480
	AT1 0251 (CA			GRADIENT INTERVAL	PH10 .17717 .11826 02993	GRADIENT INTERVAL	PH10 .15535 .10619 02241	GRADIENT INTERVAL	PH10 .20068 .14293 02357	GRADIENT INTERVAL	PH10 .15917 .11458 01866	GRADIENT INTERVAL	PH10 .20762 .14588 02609	GRADIENT INTERVAL	PH10 .23372 .09665 05904
338	1/2/1			3.32 GRA	PH1C .90077 .20895 35027	3.32 GRA	PHIC .91320 .13473 35487	3.32 GRA	PHIC .67824 02949 28887	3.32 GR/	PHIC 33535 39659 02563	3.34 GR/	PHIC -,11587 -,08750	3.34 GR	PHIC .03751 .00815 01264
DATA - CA238	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	BETAO 03168 02537 .00320	RN/L ⊨	8ETAO 02745 02251 00226	RN/L =	BETAO 03502 03061 .00180	RN/L =	BETAO 02797 02455	RN/L =	BETA0 03515 03124 .00208	RN/L =	BETAO 04085 02055 .00874
ATED SOURCE DATA	ARC		# 1339. # 190.	0 /161	BETAC 03781 01596	. 1927 0	BETAC 03372 01013 .01076	0. 193/ 0	BETAC 02325 .00227	3. 194/ 0	BETAC .01179 .03046	0. 195/ 0	BETAC .00407 .00668	0. 196/ 0	BETAC 00131 00061
TABULATED		REFERENCE DATA	YMRP ZMRP	RUN NO	ALPHAC 2.405 4.380 GRADIENT	RUN NO	ALPHAC 2.115 4.310 GRADIENT	RUN NO	ALPHAC 1.964 4.414 GRADIENT	RUN NO	ALPHAC 2.014 4.404 GRADIENT	RUN NO.	ALPHAC 2.014 4.380 GRADIENT	RUN NO	ALPHAC 2.002 4.323 GRADIENT
1AR 75		REFEREN	5500.0000 SQ.F 327.7800 IN. 2348.0400 IN.		02 7.491 7.844		02 9.818 9.759		.02 14.864 15.018		02 30.225 30.105		02 44.421 45.079		02 50.290 50.279
DATE 22 MAR			SREF " LREF " BREF " SCALE "			OF	RIGINAL POOR	P. QU.	AGE IS		4				

TABULATED SOURCE DATA - CA23B

ARC 14-120(CA23B) 747/1 ATI 02SI (CARRIER DATA)

(ANH020) (21 OCT 75)

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•	5.000 .000 .000 .600										
DATA	STAB "ELEVON "DX MACH "		CLN 00198 00193 00094		CLN -,00202 -,00201 -,00191		CLN 00224 00187 0008		CLN 00204 00199 00178		CLN 00260 00240 00221
PARAMETRIC	0000.		CSL .00005 .00026 .00027		CSL .00011 .00010 00012		CSL 00019 00015 .00064		CSL 00019 .00014 .00056		CSL 00015 .00036 .00013
	BETA BRUDDER CORB BRUDDER CORB BRUDDER CORP	.00/ 5.00	CN . 01054 . 19056 . 35360 . 08166	.007 5.00	CN 00684 .21191 .37068	.00/ 5.00	CN -,00049 -,21996 -,38269	.00/ 5.00	CN . 02478 . 23209 . 39533	.00/ 5.00	CN . 02904 . 25141 . 42062 . 08456
		ıı Ü	CA .04771 .04565 .03615	". "	CA . 04699 . 04512 . 03566 00238	ς- -	CA .04716 .04522 .03489 00258	3	CA . 04742 . 04494 . 03470 00275	1.5	CA . 04681 . 04385 . 03299 00290
		GRADIENT INTERVAL	PH10 1.27147 .63585 .63611 15293	GRADIENT INTERVAL	PH10 .93772 .69653 .55830	GRADIENT INTERVAL	PHIO 1.10478 .79993 .52700	GRADIENT INTERVAL	PH10 1.07213 .67795 .52558 12209	GRADIENT INTERVAL	PH10 1.10106 .65328 .54419
		3.32 GR	PH1C 26.67240 .45546 -6.30867	3.32 GR	PHIC -6.78415 .75071 .46391	3.32 GR	PH1C -9.30004 .81997 .43602 2.19562	3.31 GR	PHIC -20.23390 .73837 .41119 .4.74688	3.30 GR	PHIC -11.64240 .78744 .44661 2.70131
	9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	BETAO 08876 06736 09060	EN/L =	BETAO 06478 07644 07960	RN/L =	BETAO 07750 08742 07630	RN/L =	BETAO 07640 07495 07672	RN/L =	BETAO 07696 07190 07954
	1339. 190.	0 0 0	BETAC 02828 03056 03382 00132	0 0 0	BETAC 02757 03173 03467 00157	0 0 0	BETAC 03105 03424 03357 00058	0, 0, 0	BETAC 02818 03134 03172	0 0 0	BETAC 03287 03327 03485
REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC . 056 2 . 231 4 . 258 GRADIENT	RUN NO	ALPHAC 232 2.422 4.286 GRADIENT	RUN NO	ALPHAC 190 2.393 4.416 GRADIENT	RUN NO	ALPHAC 076 2.433 4.425 GRADIENT	RUN NO	ALPHAC 160 2.421 4.475 GRADIENT
REFERE	SREF = \$500.0000 SQ LREF = \$27.7800 IN BREF = 2348.0400 IN SCALE = .0125		DZ 2.999 2.972 3.376		DZ 7.356 7.305 7.176		02 9.998 9.822 9.715		DZ 14.608 14.941 14.567		02 29.742 29.812 29.812

DATE 22 1	MAR 76	TABULATED	TED SOURCE DATA	DATA - CA23B	338					PAGE	E 67
			ARC 1	14-120(CA23B)	3B) 747/1 ATI	0251	(CARRIER DATA)		(ANHO20) (21 OCT	(27 T
	REFER	REFERENCE DATA							PARAMETRIC	DATA	
SREF # LREF # BREF # SCALE #	5500.0000 327.7800 2348.0400	SQ.FT. XMRP IN. YMRP IN. ZMRP	1339.90 00 = 190.75	9000 IN. XC 0000 IN. YC 7500 IN ZC				BETA TODDER TORB TORB	00000	STAB = ELEVON = DX = MACH =	5.000 .0000 .600
		RUN NO.	0 / 0	RN/L =	3.30 GRA	GRADIENT INTERVAL	ا ا	.00/ 5.00			
	DZ 44.518 44.662 74.44	ALPHAC 106 2.474 4.486 GRADIENT	BETAC 03181 03453 03660 00104	BETAO 07540 07541 06670	PHIC -16.70720 -80009 -46794 3.38044	PH10 1.07283 .67953 .45726 13490	CA . 04623 . 04299 . 03141 00314	CN . 04200 . 26452 . 43801 . 08624	CSL .00043 .00028 .00051	CLN 00266 00252 00246 0004	
			ARC	14-120(CA23B)	747/1	AT1 0251 (CA	(CARRIER DATA)		(ANHO2	1) (08 OCT	(27 T
	REFER	REFERENCE DATA							PARAME TRIC	DATA	
SREF = LREF = BREF = SCALE =	5500.0000 327.7800 2348.0400	SO.FT. XMRP IN. YMRP IN. ZMRP	1339.9000 - 0000 - 190.7500	000 IN. XC 000 IN. YC 500 IN ZC				BETA = RUDDER = 10RB = DY	000. 4.000	STAB = ELEVON = DX = MACH =	-1.000 .000 .000 .600
		RUN NO.	. 211/0	RN/L *	3.34 GR/	GRADIENT INTERVAL	IVAL = -5.00/	00/ 5.00			
	02 3.110 3.078 3.099	ALPHAC . 173 2.255 4.353 GRADIENT	BETAC 02110 03101 03504	BETAO 09381 09582 10020	PHIC 6.95086 78797 .46166	PH10 1.29997 .90716 .69789	CA . 04701 . 04460 . 03351 00323	CN 06320 .10716 .27502	CSL .000044 .00053 .00042	CLN 00135 00160 00159	
		RUN NO	. 212/0	RN/L =	3.33 GR	GRADIENT INTERVAL	٦ د	.00/ 5.00			
	02 7.673 7.105 7.181	ALPHAC - 126 2.399 4.355 GRADIENT	BETAC 02421 03108 03397	BETAO 09799 10688 10016	PHIC -10.34500 .74259 .44740	PH10 1.37286 .98064 .69583	CA .04639 .04330 .03268 00297	CN 08131 .13296 .28949 .09284	CSL .00005 .00071 .00037	CLN 00161 00159 00154	
		NON NO	. 213/0	RN/L =	3.33 GR	GRADIENT INTERVAL	3VAL = -5.00	00/ 5.00			
	DZ 9.888 10.133	ALPHAC 253 2.398 4.413 GRADIENT	BETAC 02234 03204 03202	BETA0 10311 09252 09419	PHIC -5.03962 .72762 .41610	PH10 1.50123 .84124 .64781 18627	CA .04616 .04288 .03190 00296	CN 08648 .13668 .29932 .08275	CSL .00025 .00108 .00047	CLN 00150 00154 00138	

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PAGE	21) (08 OCT	C DATA	STAB # ELEVON # DX # MACH #		CLN 00146 00132 00138		CLN 00170 00174 00169 00000		CLN 00139 00167 00167	(08 oct	DATA	STAB = ELEVON = DX = MACH =		CLN 00090 00082 00080
	(ANHO21)	PARAMETRIC	000.		CSL 00019 .00067 .00107		CSL .00051 .00074 .00129		CSL .00080 .00062 .00115	(ANHO22	PARAMETRIC	000 000 8		. 00009 . 00045 . 000045
	•		BETA RUDDER RIORB R	.00/ 5.00	CN 05339 .14828 .30572 .08060	30/ 5.00	CN 05172 .16849 .32686 .08344	00/ 5.00	CN 03851 .18797 .33220 .08381	_		BETA # RUDDER # 10RB # DY	.00/ 5.00	CN 02831 .14762 .31295 .08135
	(CARRIER DATA)			" rb	CA .04654 .04253 .03152 00329	RVAL = -5.00/	CA .04549 .04115 .02973 00336	7VAL = -5.00/	CA . 04503 . 03988 . 02940 00340	(CARRIER DATA)			ë,	CA . 04469 . 04286 . 03315 00272
	AT1 0251			GRADIENT INTERVAL	PH10 1.34952 .82381 .71611 14531	GRADIENT INTERVAL	PH10 1.32218 .79014 .61393	GRADIENT INTERVAL	PHIO 1.17747 .75098 .67385 11742	ATI 0251 (C/			GRADIENT INTERVAL	PH10 .66443 .47319 .38018
CA23B	747/1			3.32 GR	PHIC -23.82030 .64047 .41987 5.64106	3.33 GR	PHIC -9.85063 .73818 .43980 2.37265	3.33 GR.	PHIC -9.94.199 .71032 .43911 2.47615	147/1			3.31 GR	PHIC 5.69209 .48131 .28389 -1.30708
DATA -	: 14-120(CA23B)		9000 IN. YC .0000 IN. YC 7500 IN ZC	RN/L =	BETAO 09691 09118 10412	RN/L =	BETAO 09264 08975 00086	RN/L =	BETAO 08265 08404 09687 00299	14~120(CA23B)		.9000 IN. XC .0000 IN. YC .7500 IN ZC	RN/L =	BETAO 09385 08436 08149
TABULATED SOURCE	ARC		# 1339 # 190	0. 214/ 0	BETAC 02282 02740 03224 00210	0. 215/ 0	BETAC 02376 03203 03376 00226	0. 216/ 0	BETAC 01992 03157 03304 00308	ARC		1339). <i>221/</i> 0	BETAC 01798 01994 02165 00088
TABL		REFERENCE DATA	SQ.FT. XMRP IN. YMIP IN. ZMRP	RUN NO	ALPHAC 052 2.452 4.403 GRADIENT	RUN NO	ALPHAC 137 2.487 4.402 GRADIENT	RUN NO	ALPHAC 114 2.547 4.315 GRADIENT		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC . 180 2.374 4.374 GRADIENT
MAR 75		REFERE	5500.0000 S 327.7800 1 2348.0400 1		DZ 14.808 14.795 14.946		02 29.743 29.755 29.775		05 44.609 44.4499 744.44		REFERE	5500.0000 SI 327.7800 11 2348.0400 11		02 7.175 7.048 7.827
DATE 22 h			SREF = LREF = BREF = SCALE =									SREF LREF BREF SCALE		

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DATE SO MAR	76	TABULATED	TED SOURCE DATA	DATA - CA23B	38					PAGE	69
;	1		ARC	14-120(CA23B)	38) 747/1 ATI	0251	(CARRIER DATA)		(ANHORR)	C 08 0CT	1 22 1
	REFEREN	REFERENCE DATA						ū.	PARAMETRIC	DATA	
SREF = 55 LREF = 3 BREF = 23 SCALE =	5500.0000 SQ. 327.7800 IN 8348.0400 IN	I.FT. XMRP I. ZMRP	= 1339. = 190.	.9000 IN. XC .0000 IN. YC .7500 IN ZC				BETA = RUDOER = 10RB = DY	0000.8	STAB # ELEVON # DX # MACH #	5.000
		RCN NO.	. 222/ 0	RN/L =	3.31 GRA	GRADIENT INTERVAL	VAL = -5.00/	0/ 5.00			
	DZ 10.008 9.794 10.168	AL PHAC 095 2.462 4.329 GRADIENT	BETAC 01987 02395 02393	BETAO 08749 09099 08578	PHIC -11.78550 .55746 .31698 2.85990	PH10 .62331 .50567 .40184 -,04981	CA .04471 .04300 .03374 00237	CN 03571 .16624 .31842 .08021	CSL .00049 .00027 .00047	CLN 00125 00124 00092	
		RUN NO	. 223/ 0	RN/L #	3.31 GRA	GRADIENT INTERVAL	11 10	.00/ 5.00			
ORIGINA OF POO	02 14.875 15.107 14.650	ALPHAC 131 2.479 4.467 GRADIENT	BETAC 01561 02126 02519	BETAO 07815 08579 08632	PHIC -6.77832 .49153 .32336 1.60755	PH10 .56064 .47415 .40184	CA .04520 .04308 .03340 00248	CN 02763 .18753 .34573	CSL 00015 .00036 .00033	CLN 00080 00092 00094	
L I		RUN NO	0 /422	RN/L =	3.31 GRA	GRADIENT INTERVAL	* -5.	00/ 5.00			
PAGE IS QUALITY	02 29.663 30.014 30.212	ALPHAC 130 2.540 4.360 GRADIENT	BETAC 02533 02959 03194 00148	BETA0 09274 09038 08373	PHIC -10.98930 .66761 .42012 2.67627	. 49726 . 49726 . 39081	CA .04584 .04292 .03339 00265	CN .00278 .22761 .37836 .08368	. 00014 . 00012 . 00033	CLN 00171 00178 00176	
		RUN NO). 225/ 0	RN/L =	3.31 GRA	GRADIENT INTERVA	5	.00/ 5.00			
	02 44.508 44.758 44.921	ALPHAC 097 2.520 4.300 GRADIENT	BETAC 02843 03315 03688	BETAO 08365 07930 08637 00045	PHIC -16.30560 .75396 .49188	PHIO60193. .43776 .40592	CA .04576 .04225 .03260 00287	CN 02316 24841 39871 08545	CSL .00045 .00092 .00072	CLN 00223 00241 00239	
		NON NO	0. 226/ 0	RN/L =	3.30 GR	GRADIENT INTERVAL	ا . د	.00/ 5.00			
	02 50.329 50.199 50.308	ALPHAC 122 2.456 4.443 GRADIENT	BETAC 02932 03269 03733	BETAO 08725 07506 09256	PHIC -13.55440 .76282 .48180 3.19488	PH10 .62610 .42225 .43064	CA .04579 .04259 .03183 00297	CN . 02394 . 24133 . 41313	CSL .00022 .00082 .00074	CLN 00235 00238 00242	

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) 747/1 ATI 02SI (CARRIER DATA)
AT1 0251
11/24/
ARC 14-120(CA23B)
ARC

(1 75)		5.000										
3) (38 001	DATA	STAB = ELEVON = DX = MACH =		CLN 		CLN 00098 00076		CLN 00105 00089 00072		CLN 00110 00080 00080		CLN 00212 00188 00183
(ANHO23	PARAMETR10	.000 .000 6.000		CSL 00018 .00026 .00033		CSL 00012 .00038 .00041		CSL .00004 .00005 .00043		CSL .00031 .00021 .00058		CSL . 00059 . 00051 . 00052
-		BETA RUDDER E 10RB	.00/ 5.00	CN 02519 .17461 .32805 .08186	.007 5.00	CN 03043 .18462 .34842 .08236	00/ 2.00	CN 01474 -19357 -35968 -08322	.00/ 5.00	CN 00023 .21848 .35926 .08254	00/ 5.00	CN . 02080 . 22859 . 40095
(CARRIER DATA)			-5	CA .04614 .04434 .03526 00243	۱۱ ت	CA .04612 .0445 .03481 00237	#	CA .04638 .04457 .03457 00254	ı. T	CA .04658 .04417 .03468 00256	= -5.	CA . 04632 . 04381 . 03329 00280
AT1 0251 (C.			GRADIENT INTERVAL	PH10 .79878 .53695 .40989	GRADIENT INTERVAL	PHIO . 77814 . 58519 . 42297	GRADIENT INTERVAL	PH10 .70875 .52627 .39877	GRADIENT INTERVAL	PHIO .74045 .48046 .107640	GRADIENT INTERVAL	PH10 . 74815 . 56922 . 40926 77471
1/147			3.31 GR	33.32190 .48052 .52189 -7.94312	3.31 GR	PHIC -6.67827 .47652 .27892 1.57164	3.31 GR	PHIC -13.36650 .49045 .27883 3.14770	3.31 GR	PHIC -17.55720 -2.44958 -2.8959 -4.14699	3.31 GR	PHIC -18.05020 -66551 -40567 -4.22849
ARC 14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	BETAO 08306 07840 07307	EN/L =	BETAO 08117 08467 07606	RN/L ≠	BETAO 07496 07655 07156	RN/L =	BETAO 07835 07020 07276	RN/L #	BETAO 07915 08272 07384
ARC		1339. F 190.	0. 231/ 0	BETAC 01846 02078 02437 00135	0. 232/ 0	BETAC 01844 02027 02161 00069	0. 233/ 0	BETAC01877020960214800061	J. 234/ D	BETAC 01899 01969 02234 00072	o. 235/ o	BETAC 02720 02849 03141 00091
	REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	AL PHAC .028 2.478 4.342 GRADIENT	RUN NO	ALPHAC 157 2.438 4.444 GRADIENT	RUN NO	ALPHAC 079 2.449 4.418 GRADIENT	RUN NO	ALPHAC 060 2.510 4.425 GRADIENT	RUN NO	AL PHAC 083 2 . 454 4 . 44 ! GRAD I ENT
	REFERE	5500.0000 S 327.7800 1 2348.0400 1		DZ 3.160 3.398 3.235		DZ 7.044 7.210 7.208		DZ 9.588 9.981 9.714		DZ 14.480 14.703 14.839		02 29. 767 29. 929
		SREF LREF BREF SCALE										

17	. 75)		5.000					(27 T		-1.000 .000 .000 .600				
PAGE	1) (08 OCT	DATA	STAB = ELEVON = DX = MACH =		CLN 00233 00244 00232		CLN 00252 00243 00220	4) (21 OCT	DATA	STAB = ELEVON = DX = MACH =		CLN 00108 00149 00134		CLN 00131 00136 00133
	(ANH023)	PARAME TRIC	0000.		CSL 00018 .00078 .00065		. 000043 . 00073 . 00096	(ANHOP4	PARAME TRIC	.000. .000. 6.000.		CSL .00033 .00012 .00065		CSL .00003 .00061 .00072
			BETA = RUDDER = 10RB = DY	00.5 /0	CN .03716 .24692 .41752	0/ 5.00	CN .02711 .25770 .41978			BETA = RUDDER = 10RB = DY	.007 5.00	CN 10169 .09267 .25231	.00/ 5.00	CN -,10092 ,10804 ,26907
	(CARRIER DATA)			/AL = -5.00/	CA .04641 .04317 .03229	VAL = -5.00	CA . 04605 . 04271 . 03218	(CARRIER DATA)			# R	CA . 04491 . 04284 . 03220 00292	رات . ا	CA .04487 .04258 .03183 00278
	0251			GRADIENT INTERVAL	PH10 .66987 .51262 .40355	GRADIENT INTERVAL	PHIO .60450 .44958 .35867 05410	ATI 0251 (CA			GRADIENT INTERVAL	PH10 1.02723 .75025 .59164 10226	GRADIENT INTERVAL	PH10 .91690 .72832 .61002
82	3) 747/1 ATI			3.31 GRA	PH1C 45.63040 .78245 .46454 10.73182	3.31 GRA	PHIC 12.52690 .74761 .44853 2.98358	1/247			3.30 GR	9.17543 .67006 .39684 -2.08954	3.30 GR	PHIC ~10.32810 .59509 .39700 2.45152
DATA - CA238	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	BETAO 07105 07398 07262	RN/L ≈	BETAO0630006581065810644700037	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	BETAO 10599 10795 10588	RN/L *	6ETAO -,09671 -,10545 -,00288
ATED SOURCE	ARC		# 1339, # 190,	. 236/ ņ	BETAC 03016 03288 03562	. 237/ 0	BETAC 03117 03313 03462	ARC		1339.	J. 241/0	BETAC 01687 02780 03032	0. 242/0	BETAC 01946 02538 03068
TABULATED		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 030 2.408 4.398 GRADIENT	NON NO	ALPHAC 140 2.539 4.426 GRADIENT		NCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC . 104 2.378 4.382 GRADIENT	RUN NO	ALPHAC 107 2.445 4.433 GRADIENT
MAR 76		REFEREN	5500.0000 SC 327.7800 11 2348.0400 11		02 44.538 44.541 44.965		02 49.951 49.970 50.050		REFERENCE	5500.0000 S 327.7800 1 2348.0400 1		02 2.790 3.147 3.235		02 7.214 7.169 7.223
DATE 22 M			SREF = LREF = SCALE =							SREF ** LREF ** BREF ** SCALE **				

(ANH024) (21 OCT 75)

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DATA	STAB ELEVON WACH		CLN 00100 00122 00118		CLN 00116 00100 00115		CLN 00147 00156 00176		CLN 00161 00205 00010		CLN 00175 00195 00190 00004
PARAMETRIC			CSL .00047 .00089 .00089		CSL .00044 .00078 .00060		CSL .00005 .00079 .00079		CSL .00041 .00046 .00095		CSL .00010 .00038 .00083
	BETA RANDOER IORB	5.00/ 5.00	CN 08437 .11889 .26747 .08021	-5.00/ 5.00	CN 08905 .13393 .27709	00/ 5.00	CN 05362 .15020 .31842 .08203	-5.00/ 5.00	CN 05183 .16442 .33187	5.007 5.00	CN 04513 .17985 .33403
		1	CA .04505 .04228 .03231	H	CA .04495 .04185 .03231	RVAL = -5.00/	CA .04535 .04136 .02951 00343	*	CA .04479 .04071 .02844 00350	1	CA .04493 .03995 .02846 00354
		GRADIENT INTERVAL	PHIO . 96998 . 74093 . 55238	GRADIENT INTERVAL	PH10 1.03936 73058 .64617	GRADIENT INTERVAL	PH10 .98226 .73161 .57164	GRADIENT INTERVAL	PHIO . 95638 . 67049 . 48992	GRADIENT INTERVAL	PH10 . 98795 . 70703 . 52290
		3.30 GF	PHIC -23.52540 .57491 .36604 5.36359	3.30 GF	PHIC -5.82977 .51199 .37901	3.29 GF	PHIC -22.87620 .65724 .42793 5.28621	3.28 68	PHIC -9.19757 .77909 .46835 2.18118	3.28 GR	PHIC -13.06200 74722 .44997 3.15515
	9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	BETAO 10373 10781 09868	RN/L =	BETAO 10882 11433 00108	RN/L =	BE1A0 10391 10629 10341	RN/L =	BETAO 09970 09689 08862	RN/L =	BETAO 10355 10365 09375
	1339	0. 243/0	BETAC 01552 02473 02779	0. 244/ 0	BETAC 01662 02233 02833	0. 245/ 0	BETAC 02060 02789 03348 00284	0. 246/ 0	BETAC 02125 03248 03629	0. 247/ 0	BETAC 02348 03304 03447 00253
REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 036 2.466 4.354 GRADIENT	RUN NO	ALPHAC 163 2.499 9.287 GRADIENT	RUN NO	ALPHAC 049 2.432 4.487 GRADIENT	RUN NO	AL PHAC 131 2.390 4.445 GRADIENT	RUN NO	AL PHAC 101 2.534 4.394 GRADIENT
REFERE	SREF = 5500.0000 S LREF = 327.7800 I BREF = 2348.0400 I SCALE = .0125		02 9.900 9.833 9.797		02 14.827 14.725 14.404		02 29.598 29.897 29.731		DZ 44.528 44.796 44.981		02 49.996 50.084 50.059

TABULATE	
76	
MAR	
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DATE	

BULATED SOURCE DATA - CA23B

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PAGE

t 75)		-1.000 .000 .000 .000 .600										
5) (21 OCT	DATA	STAB * ELEVON * OX **		CLN 00168 00138 00165		00148 00133 00175 00006		CLN 00140 00133 00105		CLN -,00145 -,00151 -,00153		CLN 00178 00198 00196
(ANH025)	PARAMETRIC			CSL .00064 .00121 .00080		CSL .00041 .00097 .00063		CSL .00033 .00050 .00152		CSL .00024 .00104 .00121		CSL .00033 .00072 .00118
		BETA ERUDDER E IORB E	00/ 5.00	CN 12183 .07255 .22386 .08022	00.5 /00	CN 11127 .07336 .24859 .07981	00/ 5.00	CN 09726 .11095 .25463	00/ 5.00	CN 08445 .12757 .29272 .08196	00/ 5.00	CN 06778 .14596 .31023 .08328
RRIER DATA)			NAL = -5.00/	CA .04252 .04128 .03194 00240	*VAL = -5.00/	CA .04319 .04155 .03084 00269	YVAL = -5.00/	CA .04401 .04126 .03139 00276	7VAL = -5.00/	CA .04425 .04116 .02997 00301	RVAL = -5.00/	CA . 04424 . 04077 . 02913 00326
747/1 ATI 0251 (CARRIER DATA)			GRADIENT INTERVAL	PH10 .86433 .59534 .4282 	GRADIENT INTERVAL	PH10 .82723 .51215 .50087	GRADIENT INTERVAL	PH10 . 78492 . 58935 . 46054 07410	GRADIENT INTERVAL	PH10 .79524 .57313 .44532	GRADIENT INTERVAL	PHIO .73778 .58252 .46660
			3.31 GRA	PH1C 28.15880 .54184 .40075 -6.58775	3.31 GRA	PHIC -34.19580 .51828 7.83983	3.30 GR	PHIC -54.03890 .53864 .32075 12.96060	3.31 GR/	PHIC -6.88413 .61987 .39488 1.64858	3.32 GR/	PHIC -9.85191 .77675 .44576 2.33763
ARC 14-120(CA23B)		.9000 IN. XC .0000 IN. YC .7500 IN ZC	RN/L =	BETAO 12031 10603 10502	RN/L ≈	BETAO 11596 10961 10799	RN/L =	BETAO 11070 10727 09836	RN/L =	BETAO 11035 10450 09616	RN/L -	BETAO 10223 10427 10011
ARC		# 1339. # 190.	0,0	BETAC 02082 02238 03042	0 / 0 .0	BETAC 01829 02145 03288	0 0 0	BETAC 01852 02390 02446	0 0 0	BETAC 01960 02650 03055	0 0 0	BETAC 02289 03204 03429 00255
1	REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC .039 2.367 4.353 GRADIENT	RUN NO	ALPHAC 027 2.372 4.478 GRADIENT	RUN NO	ALPHAC 013 2.543 4.374 GRADIENT	RUN NO	AL PHAC 162 2.450 4.437 GRADIENT	RUN NO	ALPHAC 132 2.364 4.412 GRADIENT
ı	REFEREN	5500.0000 SC 327.7800 IN 2348.0400 IN		02 7.209 7.216 7.326		02 9.339 10.040 10.061		02 14.643 15.082 14.801		02 29.827 30.228 30.232		02 44,600 45.018 44,806
ı		SREF = LREF = BREF = SCALE =										

DATE 22 MAR 76

(ANH025) (21 OCT 75)

	000.			I 75)		5.000 .000 .600						
DATA	STAB = ELEVON = DX = MACH =		CLN 00143 00210 00210 00014	7) (08 OCT	DATA	STAB = ELEVON = DX = MACH =		CLN 00105 000116 00091		CLN 00126 00103 00100		CLN 00156 00158 00151
PARAMETRIC	000. 0000. 8.0000.		CSL .00061 .00125 .00101	(ANHO27)	PARAMETRIC	. 000 . 000 . 000 . 000		CSL .00040 00006 00092		CSL 00008 .00085 .00071		CSL 00019 .00035 .00061
	BETA # RUDDER # 10RB # DY #	.00/ 5.00	CN 07219 .16079 .31228 :08427			BETA ** RUDDER ** 10RB ** DY **	.00/ 5.00	CN 03525 .15409 .31339 .08223	.00/ 5.00	CN 04423 .16978 .32481	00/ 5.00	CN -, 02638 -, 18941 -, 35193
		5- ± ⊐	CA .04396 .03994 .02927	03S1 (CARRIER DATA)			ii L	. 04412 . 04294 . 03323 00253	٦ - آ	CA .04434 .04263 .03321	IVAL = -5.00	CA . 04492 . 04301 . 03274 00254
		GRADIENT INTERVAL	PH10 .70952 .58103 .51783	AT1 03S1 (CA			GRADIENT INTERVAL	PH10 .83516 .68499 .51237 07592	GRADIENT INTERVAL	PHIO .8E163 .61936 .53245 07798	GRADIENT INTERVAL	PH10 .81984 .61564 .53535 06235
		3.32 GRA	PH1C -4.27924 .65573 .48166 1.09482	747/1			3.28 GRA	PH1C 20.05070 .58363 .27863 -4.73831	3.28 GR	FHIC -6 70156 46137 30547 1.60490	3.27 GR/	PHIC -9.28071 .57592 .35907 2.16828
	.9000 IN. XC .0000 IN. YC	RN/L =	BETAO 09676 10520 11097	14-120(CA23B)		3.9000 IN. XC .0000 IN. YC 1.7500 IN ZC	RN/L ≈	BETAO 11653 12102 10914	RN/L =	BETAO 12235 11126 11356	RN/L *	BETAO 11434 11107 11595 00027
)	# 1339 # 190	0 /0 .	BETAC 01744 02803 03644 00414	ARC		1339	. 261/0	BETAC 01681 02325 02083	. 262/ 0	BETAC 02014 01962 02335	. 263/ 0	BETAC 02337 02474 02682 00115
REFERENCE DATA	1.FT. XMRP I. YMRP I. ZMRP	RUN NO	ALPHAC 233 2.449 4.339 GRADIENT		REFERENCE DATA	T.FT. XMRP	RUN NO	ALPHAC .046 2.283 4.288 GRADIENT	PUN NO	ALPHAC 171 2.437 4.384 GRADIENT	NO NO	ALPHAC 143 2.462 4.479 GRADIENT
REFEREN	5500.0000 SQ 327.7800 IN 2348.0400 IN		02 49.823 50.763 50.761		REFEREN	5500.0000 SQ 327.7800 IN 2348.0400 IN		02 7.310 7.309 7.865		07 9,835 9,901 9,652		02 14.936 14.990 15.447
*	SREF = 5 LREF = 6 BREF = 6 SCALE = 6					SREF = E						

GE 75	OCT 75)		5.000 .000 .000.							0CT 75)		5.000 .000 10.000		
PAGE	08	DATA	STAB = ELEVON = DX = MACH =		CLN 00216 00205 00175		CLN 00267 00280 00234		CLN 00275 00288 00243	80) (DATA	STAB E ELEVON E DX MACH E		CLN 00173 00155
	(ANHO27)	PARAMETR I C			CSL 00000 .00076 .00056		CSL 00007 .00072 .00077		CSL .00013 .00047 .00051	(ANH028	PARAMETRIC			CSL .00020 .00049
			BETA ** RUDDER ** 10RB ** DY **	00/ 5.00	CN .00047 .22209 .37842 .08309	.00/ 5.00	CN .02791 .24735 .40236	.00/ 5.00	CN .01267 .23900 .41490			BETA = RUDDER = 10RB = DY	00/ 5.00	CN . 18547 . 35561 . 08417
	(CARRIER DATA)			TVAL = -5.00/	CA . 04519 . 04254 . 03309 00254	ស្ត	CA .04551 .04180 .03181 00293	# (L)	CA .04470 .04219 .03135 00283	(CARRIER DATA)			TVAL = -5.00/	CA . 04294 . 03251 00516
	0351			GRADIENT INTERVAL	PH10 .83374 .63153 .51881 06971	GRADIENT INTERVAL	PH10 .78267 .63500 .48893	GRADIENT INTERVAL	PHIO .83308 .64198 .53666 05539	AT1 0351 (C/			GRADIENT INTERVAL	PH10 .7772. .70129
38	3B) 747/1 AT!			3.27 GR	PHIC -9.99059 .66612 .39889 2.40570	3.27 GR	PHIC -16, 17440 -82395 -45049 3.89001	3.28 GR/	PHIC -13.25630 .88102 .46373 3.12501	1/44/			3.28 GR/	PHIC .64808 .36616 13947
: DATA - CA23B	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	BETAO 11546 11120 00090	RN/L ≠	BETAO 10878 11525 10459	RN/L =	BETAO 11579 11531 11520	14-120(CA23B)		9.9000 IN. XC .0000 IN. YC 3.7500 IN ZC	RN/L =	EETAO 11208 12642 00709
ATED SOURCE	ARC		1339.	. 264/0	BETAC 02834 02940 03050	. 265/ 0	BETAC03278036430344000043	. 256/ 0	BETAC 03225 03746 03580	ARC		1339 1 190	1. 281/0	BETAC 02782 02861 0039
TABULATED		REFERENCE DATA	SO.FT. XRRP IN. YRRP IN. ZRRP	RUN NO	ALPHAC -,161 2.529 4,385 GRADIENT	RUN NO	ALPHAC 113 2.534 4.379 GRADIENT	RUN NO	ALPHAC 137 2.437 4.427 GRADIENT		REFERENCE DATA	Z. FT. XMRP	RUN NO	ALPHAC 2.460 4.481 GRADIENT
MAR 76		REFERE	5500.0000 SC 327.7800 II 2348.0400 II		02 29.711 29.841 30.092		DZ 44.673 44.791 44.852		DZ 50.205 50.115 50.310		REFERE	5500.0000 SQ. 327.7800 IN. 2348.0400 IN.		3.140 3.154
DATE 22 M			SREF = LAEF = BREF = SCALE =		A	DE OF	IGINAT .					SREF = LREF = BREF = SCALE =		
							IGINAL P POOR QUA	AG LI	E B					

ì E 76	(27 1)		5.000 .000 10.000												,
PAGE	.00 80) (8	DATA	STAB # ELEVON # DX # MACH #		CLN 00147 00120		CLN 00118 00094 00010		CLN 00100 00063		CLN 00214 00189		CLN 00267 00254 .00005		CLN -,00274 -,00236
	(ANHO2B)	PARAMETR1C			CSL .00018 .00022 .00001		CSL .00015 .00046		CSL .00054 .00054		CSL .00067 .00045 00010		CSL .00083 .00106 .00009		CSL .00063 .00099
			BETA # RUDDER # 10RB = DY =	00/ 5.00	CN .16220 .36466 .08478	00/ 5.00	CN .17496 .37454 .08250	00/ 5.00	CN .18364 .38383 .08154	00/ 5.00	CN .21450 .41166	-5.00/ 5.00	CN .21873 .42416 .08460	. 00' 2'00'	CN .22318 .43767 .08655
	(CARRIER DATA)			# -5.	CA .04421 .03284 00475	, 5.	CA . 04419 . 03251 00482	RVAL = -5.00	CA . 04444 . 03262 00482	RVAL = -5.00	CA .04370 .03175 00512	"	CA .04355 .03115 00511	# C	CA . 04352 . 03004 00544
	AT1 0351 (CA		·	GRADIENT INTERVAL	PH10 .80635 .63461 07193	GRADIENT INTERVAL	PH10 .75603 .64226 04702	GRADIENT INTERVAL	PHIO . 82708 . 60938 08868	GRADIENT INTERVAL	PH10 .78798 .63585	GRADIENT INTERVAL	PH10 .73323 .64384 03681	GRADIENT INTERVAL	PH10 . 79184 . 59229 08052
CA23B	747/1			3.28 GR	PHIC .71587 .34213 15652	3.28 GR	PHIC .60993 .29588 12981	3.28 GR	PHIC .61866 .24945 15039	3.29 GR	PHIC . 79114 . 40467 6549	3.29 65	PH1C .93679 - .46462 19445	3.29 GF	PH1C .99020 .44362 22054
DATA -	14-120(CA23B)		9000 IN. XC 10000 IN. YC 7500 IN ZC	RN/L =	BETAO 11428 11343 .00035	RN/L =	BETAO 10749 11604 00353	RN/L #	BETA0 11676 10932	RN/L =	BETAO 11357 11495 00059	RN/L *	BETAO 10437 11710 00524	RN/L =	BETAO 11216 10756
ATED SOURCE	ARC		1339.). 282/ U	8ETAC 02526 02631 00044). 283/ 0	BETAC 02201 02315 00047	0. 284/ 0	BETAC 02188 01949	0. 285/ 0	BETAC 03009 03186 00076	0. 286/ 0	BETAC 03422 03663 00099	0. 287/ 0	BETAC 03561 03511
TABULATED		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 2.022 4.410 GRADIENT	RUN NO	ALPHAC 2.068 4.488 GRADIENT	RUN NO	ALPHAC 2.026 4.481 GRADIENT	RUN NO	ALPHAC 2.180 4.515 GRADIENT	RUN NO	ALPHAC 2.093 4.521 GRADIENT	RUN NO.	ALPHAC 2.061 4.539 GRADIENT
MAR 76		REFEREN	5500.0000 SQ 327.7800 IN 2348.0400 IN .0125		02 7.424 7.204		DZ 9.851 9.970		DZ 14.671 14.337		02 29.878 29.674		02 44.780 45.100		50.200 50.258
DATE 22 1			SREF # LREF # BREF # SCALE #												

- CA23B
CE DATA
TABULATED SOUR

MAR 75	TABULATED	ATED SOURCE DATA	DATA - CA23B	338					PAGE	je 77
) :		ARC	0	147/1	AT1 0351 (CA	(CARRIER DATA)		(ANHO29	9) (08 0C1	t 75)
REFERE	REFERENCE DATA						•	PARAME TRIC	DATA	
5500.0000 S 327.7800 1 2348.0400 1	SO.FT. XMRP IN. YMRP IN. ZMRP	1339.9000 = 00000 = 190.7500	000 IN. XC 000 IN. YC 500 IN ZC				BETA # RUDDER # 10RB # DY #		STAB = ELEVON = DX = MACH =	5.000 .000 10.000 .600
	RUN NO.	. 291/0	RN/L ≠	3.29 SRA	SRADIENT INTERVAL	. 5	.00/ 5.00			
02 7.274 7.616	ALPHAC 2.465 4.442 GRADIENT	BETAC 02502 02878 00190	BETAO 11389 11296	PHIC .58170 .37160 10624	PH10 . 52553 - 05500	CA . 04159 . 03147 00512	CN .17276 .33753 .08332	CSL .00036 .00033 00002	CLN 00144 00140	
	NOW NO). 292/ 0	RN/L =	3.29 GR	GRADIENT INTERVAL	5.	00/ 5.00			
DZ 10.037 10.105	ALPHAC 2.057 4.486 GRADIENT	BETAC 02401 02501 00041	BETAO -, 10716 -, 11457 -, 00305	PHIC .66883 .31970 14370	PH10 .60698 .53198	CA . 04294 . 03142 00474	CN . 14820 . 34984 . 08299	CSL . 00063 . 00074 . 00005	CLN 00144 00114	
	RUN NO	5. 293/ 0	RN/L ≈	3.28 GR/	GRADIENT INTERVAL	" -5.	00/ 5.00			
02 15.073 14.864	ALPHAC 2.020 4.412 GRADIENT	BETAC 01983 02121	BETAO 11692 11088	PHIC .56255 .27569 11990	PH10 .66418 .51875 06079	CA .04367 .03218 00480	CN .15992 .35643 .08214	CSL .00012 .00057 .00019	CLN 00095 00078	
	RUN NO	0. 294/0	RN/L =	3.29 GR	GRADIENT INTERVAL	#	00/ 5.00			
02 30.231 29.953	ALPHAC 2.128 4.510 GRADIENT	BETAC 02803 02957 00065	BETAO 11207 11126	PH1C .75465 .37609 15896	PH10 .62962 .51576 04781	CA .04343 .03155 00499	CN .20008 .39493 .08182	CSL .00015 .00051 .00015	CLN 00177 00163 .00006	
	RUN NO	0. 295/0	RN/L =	3.28 GR	GRADIENT INTERVAL	ii.	00/ 5.00			
02 44.559 45.001	ALPHAC 2.087 9.446 GRADIENT	BETAC 03479 03809 00140	BETAO 11354 12021 00283	PHIC .95549 .49137 19673	PH10 .64550 .55913 03661	CA .04360 .03114 00528	CN .21120 .41183	CSL .00042 .00054 .00005	CLN 00263 00255 .00003	
	ON NOW	10. 296/ 0	RN/L =	3.28 GF	GRADIENT INTERVAL	ı 11	5.00/ 5.00			
50.108 50.108 50.709	ALPHAC 2.027 4.547 GRADIENT	8ETAC 03444 03375	BETAO 11315 11536 00088	PHIC .97390 .42574 21753	PH10 .64654 .53117 04578	CA .04337 .03020 00523	CN . 20876 . 42154 . 08444	CSL .00086 .00134	CLN 00271 00232 .00016	

DATE 22 MAR 76

(ANH030) (08 OCT 75)

ARC 14-120(CA23B) . 747/1 ATL 03S1 (CARRIER DATA)

	5.000 .000 20.000 .600												
DATA	STAB = ELEVON = DX = MACH =		CLN 00168 00159		CLN 00153 00137		CLN 00126 00111		CLN 00185 00180		CLN 00261 00241		CLN 00275 00261 .00006
PARAME TRIC			CSL .00091 .00101		CSL .00066 .00074 .00004		CSL .00043 .00086		CSL .00056 .00132 .00029		CSL .00043 .00092		CSL .00106 .00071
	BETA RUDDER BIORB BIORB	00/ 5.00	CN . 18259 . 34044 . 08396	.00/ 5.00	CN . 15880 . 35988 . 08128	.00/ 5.00	CN .17900 .36581 .08235	.00/ 5.00	CN . 18394 . 40628 . 08502	.00/ 5.00	CN .21845 .40179 .07860	.00/ 5.00	CN . 21393 . 41687 . 08641
		WAL = -5.00/	CA . 04081 . 03087 00529	ا 5-	CA . 04241 . 03022 00493	ا د ک	CA . 04240 . 03116 00496	п -5	CA . 04302 . 03018 00491	il D	CA . 04324 . 03135 00509	и С	CA .04308 .03080 00523
		GRADIENT INTERVAL	PHIO .63524 .52950 05678	GRADIENT INTERVAL	PHIO . 65572 . 50770 05983	GRADIENT INTERVAL	PH10 . 62932 . 51218 05164	GRADIENT INTERVAL	PH10 .63959 .54039 03793	GRADIENT INTERVAL	PHID .63408 .54147	GRADIENT INTERVAL	PH10 .60343 .53565 02886
		3.28 GR/	PHIC 61408 37869	3.28 GR/	PHIC . 70857 . 34524 14686	3.28 GR/	PHIC .60106 .31542 12592	3.28 GR/	PH1C . 78313 . 37597 15569	3.29 GR/	PHIC .93332 .45093 20679	3.30 GR/	PH1C .94413 .49362 19182
	.9000 IN. XC .0000 IN. YC .7500 IN ZC	RN/L =	BETA0 11428 11298 .00069	RN/L =	BETAO 11534 10935 .00242	RN/L =	BETAO 11218 10951 .00118	RN/L =	BETA0 11172 11666 00189	RN/L =	BETAO 11196 11582 00165	RN/L =	BETAO 10641 11483 00358
	1339 H 190	. 301/ 0	BETAC 02651 02875 00119	305/ 0	BETAC 02499 02706 00084	. 303/ 0	BETAC 02278 02442 00072	. 304/ 0	BETAC 02643 02982 00130	. 305/ 0	BETAC 03388 03469 00035	. 306/ 0	BETAC 03405 03800 00168
ENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 2.474 4.355 GRADIENT	RUN NO	ALPHAC 2.021 4.495 GRADIENT	RUN NO	ALPHAC 2.172 4.441 GRADIENT	RUN NO.	ALPHAC 1.934 4.549 GRADIENT	RUN NO	ALPHAC 2.080 4.413 GRADIENT	ACN NO	ALPHAC 2.067 4.416 GRADIENT
REFERENCE	5500.0000 8 327.7800 1 2348.0400 1		02 7.146 7.541		DZ 10.020 10.077		02 14.887 14.608		02 30.123 29.781		02 44.889 44.724		02 50.425 50.408
	SREF = LREF = BREF = SCALE =												

PAGE 79 DATA STAB = 5.000 ELEVON = 60.000 DX = 0.00158 001580016600188001890018100181001890018900189001890018900189001890018900189001890018900189001890018900189	(ANH031) PARAMETRIC D . 000 E . 000 S . 000 D . 000 S . 000 39 - 000 15 . 0	BETA RUDDEF 10RB 10RB 10RB (CN (CN (CN (CN (CN (CN (CN (CN (CN (CN	ER DATA A A 01-24 1 03229 003229 003110 00489 03155 004404 04406 03326 00482 03326 004426 03326 004426 03326 004426	11	29 (PHIC 598682 (SB862 (SB862 (SB862 (SB862 (SB869	SOURCE DATA - CA23B ARC 14-120(CA23B) 1339-9000 IN. XC 190.7500 IN. ZC 190.7500 IN. ZC 190.7500 IN. ZC 190.7500 IN. ZC 100.7500 IN. ZC 11.00.20 2. 0 RN/L = 3. AC BETAO AC BETAO 1152 11154 11156 111754 111754 111754 111754 111754 111754 111754 111754 111754 111754 111754 111756 111756 111756 111756 111756 111756 111757 111757 111756 111756 111756 111756 111756 111756 111756 111757 111756 111756 111756 111756 111756 111756 111756 111756 111756 111756 111756 111756 111756 111756 111756 111756	31 31 31 31 31 31 31 31 31 31 31 31 31 3	TABULATED REFERENCE DATA 00000 SQ.FT. XMRP = 78000 IN. YMRP = 10125 10125 RUN NO. 3 Z ALPHAC BE 2.4400 RUN NO. 3 RUN NO.	DATE 22 MAR 76 REFERENCE = 5500.0000 SQ LREF = 2348.0400 IN BREF = 2348.0400 IN SCALE = 2348.0400 IN DZ 7.139 7.034 0.2 DZ 9.890 DZ 14.857 14.654 DZ 29.665 29.802 DZ HW.676 HW.732
CLN 00270 00247	CSL .00070 .00096	NO NO 1024.	.A 04389 03155 00521		PHIC 1.00299 .47336	$o \pm u \circ$	BETAC 03506 03506	ALPHAC 2.003 4.371 GRADIENT	02 50.207 50.098
		.00/ 5.00	1. 1.	GRADIENT INTERVAL	3.29 68	RN/L =	0.316/0	RUN NO	
CLN 00254 00272 00007	CSL .00030 .00082 .00082	CN .21468 .41665 .08417	CA .04408 .03183 00511	PHIO .84522 .64588 08307	PH1C .96397 .51921 18536	BETAO 11820 11536	BETAC 03314 03955 00267	ALPHAC 1.970 4.370 GRADIENT	DZ 44.676 44.732
		0/5.			62.		. 315/	RUN N	
CLN 00237 00179	CSL .00054 .00084 .00013	CN . 19964 . 39358 . 08506	\mathbf{o}	PHIO .83590 .63688 08772	PHIC ,93809 .38367 24316	BETAO 11754 11253 .00220	BETAC 03245 02852	ALPHAC 1.982 4.262 GRADIENT	02 29.665 29.802
		ιΩ	ž- -5	ADIENT INTE	. 29	RN/L =	. 314/	R N	
CLN 00121 00089 .00013	CSL .00115 .00039 00030	CN .17594 .39715 .08631	CA . 04404 . 03156 00487	PHIO .84748 .62948 08506	PH1C .62868 .29706 12939	BETA0 11919 11366 .00216	BETAC 02152 02343 00075	ALPHAC 1.961 4.524 GRADIENT	02 14.857 14.654
		00/5	۱۱ ک	ADIENT INTE	.30		. 313/		
CLN 00148 00106 .00016	CSL .00048 .00081 .00013	CN . 17083 . 38943 . 08538	CA .04362 .03110 00489	PH10 .84432 .63820 08051	PH1C .69479 .30304 15301	BETAO 11866 11577 .00113	BETAC 02412 02404 .00003	AL PHAC 1.989 4.549 GRAD IENT	DZ 9.707 9.890
		0/5.	ا گ		62.		. 312/	PUN N	
CLN 00158 00123	CSL .00073 .00039 00017	CN . 19527 . 36527 . 08788	CA . 04241 . 03229 00523	PH10 .81921 .67753	PHIC .58862 .32910 13415	BETAO 11848 12080 00120	BETAC 02506 02510	ALPHAC 2.440 4.374 GRADIENT	02 7.139 7.034
		5.	# .5.	ADIENT INTER	. 29		. 311/	R N N	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						ZZZ	= 1339 = 190		5500.0000 S 327.7800 11 2348.0400 11
-	U							NCE DATA	REFEREI
(08 OCT	(ANHO31)		ARRIER DATA	0351	1/247	14-120(CA2	ARC		
					338	- 1	-	TABUL	IAR 76

ORIGINAL PAGE TO OF POOR QUALITY (08 OCT 75)

(ANH032)

DATA
ARRIER
0351 ((
AT:
747/1
20(CA238)
14-
ARC

	5.000 .000 .000 .600												
DATA	STAB = ELEVON # DX MACH =		CLN 00545 00534 00006		CLN 00436 00283 .00064		CLN 00344 00190		CLN 00182 00022		CLN 00007 .00146 .00066		CLN 00058 .00021
PARAMETRIC	. 000 . 000 . 000 . 000 . 010 . 000		CSL .00496 .00511 .00059		CSL .00398 .00537 .00059		CSL .00397 .00478 .00034		CSL .00302 .00318		CSL .00158 .00192		CSL .00130 .00162
	BETA RUDDER 10RB RUDOE	00/ 5.00	CN . 17198 . 33185 . 08240	00/ 5.00	CN . 15742 . 35237 . 08189	.007 5.00	CN . 15944 . 35473 . 08181	00/ 5.00	CN . 17860 . 35018 . 08255	00/ 5.00	CN .19673 .39060 .08337	.00/ 5.00	CN . 20813 . 40656 . 08384
		₹VAL = -5.00/	CA . 04338 . 03422 00472	VAL = -5.00	CA . 04416 . 03364 00442	ii.	CA . 04427 . 03408 00427	WAL = -5.00/	CA . 04426 . 03468 00436	NAL = -5.00	CA .04426 .03341 00467	ii R	CA .04378 .03265 ~.00470
		GRADIENT INTERVAL	PH10 .59455 .38910 10588	GRADIENI INTERVAL	PHIO .63058 .45887 07212	GRADIENT INTERVAL	PH10 .58939 .43300 06552	GRADIENT INTERVAL	PH10 .62806 .42100 09413	GRADIENT INTERVAL	PH10 .68540 .46823 09339	GRADIENT INTERVAL	PH10 .66315 .51052 06445
		3.30 GR/	PHIC .86275 .40825 23423	3.30 GR	PHIC .90034 .20086 29381	3.30 GR/	PHIC .74527 .12651 25922	3.30 GR	PH1C .41438 .00590 18569	3.30 GR	PHIC .20473 08191 12326	3.30 GR	PHIC .38496 .10617 11780
	.9000 IN. XC .0000 IN. YC .7500 IN ZC	RN/L =	BETAO 08529 06925	RN/L =	BETAO 08867 08216	RN/L =	BETAO 08306 07727 .00242	RN/L =	BETAO 08945 07449	RN/L =	BETAO 09627 08313	RN/L =	BETAO 09255 09105
	1339 190	321/0	BETAC 03589 03078 .00263	322/ 0	BETAC 03140 01534 .00675	323/0	BETAC 02575 00963). 324/ D	BETAC 01481 00044 .00654	325/0	BETAC 00706 00568	0. 326/ 0	BETAC 01315 00801
REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 2.384 4.324 GRADIENT	RUN NO.	ALPHAC 1.999 4.379 GRADIENT	RUN NO.	ALPHAC 1.980 4.357 GRADIENT	RUN NO.	ALPHAC 2.049 4.248 GRADIENT	RUN NO	ALPHAC 1.976 4.301 GRADIENT	RUN NO	ALPHAC 1.958 4.325 GRADIENT
REFERE	5500,0000 SC 327,7800 H 2348,0400 H		3.217 3.310		02 7.247 7.563		02 10.032 9.896		02 15.217 15.047		DZ 29.998 29.890		02 44.648 44.989
	SREF LREF BREF SCALE												

PAGE B1	A) (ANH032) (08 OCT 75)	PARAMETRIC DATA	BETA = .000 STAB = 5.000 RUDDER = .000 ELEVON = .000 10RB = 6.000 DX = .000 DY = 10.000 MACH = .600	00/ 5.00	CN CSL CLN .21535 .0007800091 .40340 .0015600023 .08194 .00034	A) (ANH033) (08 OCT 75)	PARAMETRIC DATA	BETA = .000 STAB = 5.000 RUDDER = .000 ELEVON = .000 IORB = 8.000 DX = .000 DY = IO.000 MACH = .600	5.00/ 5.00	CN CSL CLN .16438 .0052400365 .31096 .0061100171 .07943 .00047 .00105	5.00/ 5.00	CN CSL CLN . 12322 . 0053800298 . 32276 . 0057500050 . 08262 . 00015 . 00103	5.00/ 5.00	CN CSL CLN .14293 .0037700132 .34060 .00413 .00157 .08257 .00015	5.00/ 5.00	CN CSL CLN 17648 .00189 .00145 37993 .00202 .3759
	ARRIER DATA)			RVAL = -5	CA .04393 .03290 00481	(CARRIER DATA)		,	,	. CA . 04160 . 03301 00466	RVAL * -5	CA . 04291 03292 00414	INTERVAL = -	CA . 04324 . 03314 00422	INTERVAL = -	CA .04366 .03282
	ATI 03SI (CARRIER			GRADIENT INTERVAL	PH10 .67894 .52712	AT1 0351 (C			GRADIENT INTERVAL	PH10 .41024 .32960 04370	GRADIENT INTERVAL	PH10 .44991 .33288	GRADIENT INTE	PH10 .48908 .34564 .05992	GRADIENT INTE	PH10 .47344 .35859
23B	747/1			3.30 GRA	PH1C . 52540 . 16993 15489	747/1			3.30 GR/	PHIC .50255 .02781 25727	3.32 GR	PHIC .53273 07601 25205	3.31 GR	PHIC .22675 24911 19876	3.31 GR	PH1C 25403 - 33975
DATA - CA23B	14-120(CA23B)		.9000 IN. XC .0000 IN. YC .7500 IN ZC	RN/L =	BETAO 09477 09327 .00065	14-120(CA23B)		.9000 IN. XC .0000 IN. YC .7500 IN ZC	RN/L *	BETAO 07366 07009	RN/L =	BETAO 07840 07059	RN/L =	BETAO 08521 07346	RN/L =	9ETA0 08245
SOURCE	ARC		= 1339 = 190	. 327/ 0	BETAC 01805 01263	ARC		= 1339 = 190	331/0	BETAC 02145 00208 .01050	332/ 0	BETAC 01773 .00573	0. 333/ 0	BE TAC 00765 .01880	0. 334/ 0	BETAC .00868
TABULATED		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	ACN NO	ALPHAC 1.969 4.264 GRADIENT		REFERENCE DATA	O.FT. XMRP N. YMRP N. ZMRP	RUN NO	AL PHAC 2.446 4.292 GRAD 1ENT	RUN NO	ALPHAC 1.907 4.322 GRADIENT	RUN NO	AL PHAC 1.933 4.327 GRAD1ENT	RUN NO	ALPHAC 1.958
DATE 22 MAR 76		REFEREN	SREF = 5500.0000 SO. LREF = 327.7800 IN BREF = 2348.0400 IN SCALE = .0125		02 49.978 50.163		REFEREN	SREF = 5500.0000 SO. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125		02 7.500 7.513		02 10.263 9.859		02 15.012 14.957		02 95.834

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PAGE	33) (08 OCT	C DATA	STAB ELEVON # DX MACH #		CLN .00042 .00116		CLN 00041 .00039	34) (08 OCT	DATA			CLN - 00333 - 00301 - 00290		CLN 00329 00308 00283
	(ANH033)	PARAMETRIC	. 000 . 000 . 000 . 000		CSL .00100 .00178		CSL . 00111 . 00196	(ANH034)	PARAMETR1C	000.9		CSL 0000B .00043 .00041		CSL .00057 .00041 .00026
	-		BETA = RUDDER = 10RB = DY	00/ 5.00	CN . 19255 . 39110	00/ 5.00	CN .19634 .39378 .08411	•		BETA = RUDDER = 10RB = DY	00/ 5.00	CN 04943 .14981 .31093 .08408	.007 5.00	CN 04756 .16080 .32450
	ATI 03SI (CARRIER DATA)			INTERVAL = -5.	CA . 04421 . 03330 00453	INTERVAL = -5.007	CA .04380 .03285 00467	(CARRIER DATA)			₹VAL = -5.00/	CA .04577 .04467 .03596 00224	ا 1	CA . 04538 . 04454 . 03547 00215
	AT1 0351 (C			GRADIENT INTE	PH10 .49825 .39760 04:82	GRADIENT INTE	PHIO .52405 .40359 05132	AT1 0351 (C			GRADIENT INTERVAL	PH10 1.09762 .81035 .62495	GRADIENT INTERVAL	PHIO 1.02545 .74601 .61357 09269
CA23B	238) 747/1		υu	3.30 64	PHIC .13655 10674 15955	3.30 6	PH1C .40462 .09174 13329	338) 747/1			3.31 GA	PHIC -53.38770 1.31357 .56061 12.78561	3.31 GR	PH1C -16.57080 .99894 .53900 3.93383
ICE DATA - C	C 14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN 2C	RN/L =	BETAO 08594 08435 .00066	RN/L =	BETAO 09054 08550 .00215	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	BETAO 11284 11407 10998	RN/L =	BETA0 10795 10599 10964 00034
TABULATED SOURC	ARC		1339.). 335/ 0	BETAC 00446 .00050). 336/ 0	BETAC 01351 00681	ARC		* 1339. * 190.	. 341/ 0	BETAC 04077 04009 04164 00019	. 342/ 0	BETAC 03788 04051 04091
TABU		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 1.871 4.278 GRADIENT	AUN NO	ALPHAC 1.913 4.260 GRAD1ENT		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 031 2.266 4.259 GRADIENT	RUN NO	ALPHAC 127 2 . 324 4 . 353 GRADIENT
22 MAR 76		REFE	5500.0000 327.7800 2348.0400		DZ 44.819 45.000		DZ 50.002 50.443		REFER	5500.0000 327.7800 2348.0400		02 1.515 1.466 1.364		02 3.218 2.877 3.380
DATE 22			SREF "LREF "BREF "SCALE "							SREF ** LREF ** BREF ** SCALE **				

E 83	1 75)		5.000 .000 .000 .600										
PAGE	4) (08 OCT	DATA	STAB = ELEVON = DX = MACH =		. CLN 00303 00266 00231		CLN 00280 00250 00203		CLN 00233 00198 00157		CLN 00293 00268 00196		CLN 00323 00300 00268
	(ANHO34)	PARAMETRIC	6.000 		CSL 00018 .00047 .00054		CSL .00022 .00039 .00055		CSL 00007 .00005 .00061		CSL 00034 .00040 .00015		CSL 00015 .00071 .00054
			BETA = RUDDER = 10RB = DY	.007 5.00	CN 04320 .17520 .32819	.007 5.00	CN -,03184 -,18113 -,3823 -,08234	.00/ 5.00	CN -,02583 -,19634 35308 .08426	.00/ 5.00	CN 00297 .28281 .38377 .08532	00.8 /00.	CN 01585 23859 40265 08551
	(CARRIER DATA)			* .5	CA . 04569 . 04469 . 03614 00202	ដ	. 04579 . 04458 . 03595 00209	ا پر	CA . 04579 . 04450 . 03564 00216	# -5	CA . 04593 . 04382 . 03431 00245	i L	CA .04579 .04305 .03297 00274
	AT1 0351 1CA			GRADIENT INTERVAL	PH10 1.04426 .72887 .58785 10268	GRADIENT INTERVAL	PH10 1.03142 .73083 .56184 10513	GRADIENT INTERVAL	PH10 .99812 .71547 .56279	GRADIENT INTERVAL	PHIO 1.05513 .72658 .52895 11658	GRADIENT INTERVAL	PHIO .96563 .69784 .59033
38	1 / 747 (3.30 GR/	PH1C -7.34571 .89645 .47763	3.30 GR	PH1C -8.02130 .84303 .43814 1.96825	3.30 GR	PHIC -6.76144 .76959 .40248 1.66604	3.29 GR	PH1C -7.87449 .89504 .44225 1.92536	3.30 GR	PHIC -9.54070 .92333 .50863 2.31764
: DATA - CA23B	14-120(CA23B		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L *	BETAO 10742 10413 10322	RN/L ■	BETAO 10667 10468 09942	RN/L =	BETAO 10281 10222 09946	RN/L =	BETAO 10822 10457 09353	RN/L =	BETAO - 09929 - 10021 - 10475 - 00116
TABULATED SOURCE	ARC		# 1339. # 190.	J. 343/ 0	BETAC 03558 03517 03508	NO. 344/ 0	BETAC 03420 03433 03249	NO. 345/ 0	BETAC 03016 03132 02981	NO. 346/ 0	BETAC 03699 03596 03291	10. 347/ 0	BETAC 0395! 03779 03806
TABU		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN	ALPHAC 285 2.312 4.212 GRADIENT	N NOW	ALPHAC -,243 2.334 4.253 GRADIENT	RUN	ALPHAC 254 2.332 4.248 GRADIENT	RUN	ALPHAC 267 2.360 4.268 GRADIENT	RUN NO	ALPHAC 235 2.345 4.291 GRADIENT
22 MAR 76		REFEREI	5500.0000 SQ 327.7800 IN 2348.0400 IN		DZ 7.400 7.390 7.046		02 9.858 9.870 9.840		02 14.745 14.663 14.715		DZ 29.743 29.911 29.627		DZ 44.607 44.784 44.631
52 1			H H H U										

DATE 22 MAR 76

&	, 57		5.000 .000 .000 .600					75)		5.000 .000 .000 .600				
PAGE	+) (08 OCT	DATA	STAB ELEVON # DX MACH		CLN -,00299 -,00289 -,00267		CLN 00302 00282 00236	5) (08 OCT	DATA	STAB * ELEVON = DX = MACH =		CLN0020600169 +.00134		CLN 00214 00171 00125
	(ANH034)	PARAMETRIC	0000. 0000. 0000.		CSL .00043 .00079 .00122		CSL .00046 .00037 .00096	(ANH035)	PARAME TRIC	0000.		CSL . 00030 . 00032 . 00032		CSL 00041 00026 00007
	•		BETA RUDDER BIORB BOY	.00/ 5.00	CN . 01532 . 24095 . 40626 . 08672	.00/ 5.00	CN .01672 .24442 .41283			BETA # RUDDER # 10R8 # DY	00/ 5.00	CN 00122 .19054 .35369 .08379	00/ 5.00	CN 00535 -21130 .36508 .08249
	(CARRIER DATA)			# 7	CA .04538 .04270 .03249 00275	# C	CA .04529 .04270 .03227	(CARRIER DATA)			ة أي	CA . 04772 . 04590 . 03646 00261	" -5.	CA .04730 .04507 .03617 00238
	AT1 0351 (CA			GRADIENT INTERVAL	PH10 1.04302 .71885 .56278	GRADIENT INTERVAL	PHIO .90528 .74681 .53658	ATI 03SI (CA			GRADIENT INTERVAL	PHIO 1.69880 1.16320 79606	GRADIENT INTERVAL	PHIO 1.68804 1.08391 .81823
CA23B	1/247			3.30 GR	PHIC -8.32467 .90826 .50525 2.05183	3.31 GR	PHIC -7.14063 .93720 .46705 1.74123	747/1			3.30 GR	PHIC 76.95740 .70017 .37812 -18.45311	3.29 GR	PHIC -8.22679 .70182 .36910
DATA -	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L ×	BETAO 10695 10326 09959	EN/L =	BETAO 09233 10631 09504 00083	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	BETAO 11846 12457 11301	RN/L =	BETAO 11798 11905 11699
TABULATED SOURCE	ARC		1339	348/ 3	BETAC 03498 03742 03761	0 349/ 0	BETAC 03495 03743 03481 00002	ARC		1339	. 351/0	BETAC03028027730279800056	, 352/ 0	BETAC 03062 02923 02756
TABUL		REFERENCE DATA	YMRP Y YMRP	RUN NO	ALPHAC -,239 2,361 4,269 GRADIENT	RUN NO	ALPHAC 279 2.279 4.275 GRAD I EN T		REFERENCE DATA	2.FT. XMRP 4. YMRP V. ZMRP	RUN NO	ALPHAC . 007 2.270 4.244 GRADIENT	RUN NO	ALPHAC 212 2.387 4.282 GRADIENT
MAR 75		REFEREN	5500.0000 SQ 327.7800 IN 2348.0400 IN		52 19.960 50.084 50.051		02 61.655 61.659 61.640		REFEREN	5500.0000 SQ 327.7800 IN 2348.0400 IN		02 3.392 3.273 3.233		02 7.633 7.582 7.362
DATE 22 MA			SREF = 5 LREF = 6 BREF = 6 SCALE =							SREF = 1 LREF = 2 BREF = 2 SCALE = 3				

82	1 75)		5.000 .000 .600								
PAGE	5) (08 OCT	DATA	STAB = ELEVON = DX MACH =		CLN 00212 00166 00115		CLN 00188 00134 00100		CLN 00274 00262 00210		CLN 00304 00261 00237
	(ANH035)	PARAMETRIC	0000		CSL .00021 .00017 .00003		CSL 00024 00039 .00034		CSL .00041 .00062 .00060		CSL .00012 .00028 .00059
			BETA = RUDDER = 10RB = DY	00/ 5.00	CN .00029 .21517 .37212	00/ 5.00	CN .00218 .22477 .38528 .08386	00/ 5.00	CN . 01388 . 24198 . 40999	00/ 5.00	CN . 02673 . 24316 . 41506
	03S1 (CARRIER DATA)			NAL = -5.00/	CA .04710 .04491 .03557 00249	WAL = -5.00/	CA . 04675 . 04470 . 03484 00251	TVAL = -5.00/	CA .04614 .04352 .03309 00275	7VAL = -5.00/	CA . 04603 . 04308 . 03249 00289
	.T1 03S1 (CA			GRADIENT INTERVAL	PH10 1.80764 1.10894 .85163 21682	GRADIENT INTERVAL	PH10 1.70827 1.09587 .78558 20346	GRADIENT INTERVAL	PHIO 1.75519 1.07113 .80534	GRADIENT INTERVAL	PH10 1.75263 1.05451 74408
38	3B) 747/1 AT1			3.29 GR/	PHIC -7.85370 72877 36932 1.91436	3.89 GR/	FHIC -6.07208 .68053 .33796 1.46207	3.29 GR	PHIC ~7.33018 .90855 .46363 1.78730	3.30 GR	PHIC -7.92866 90396 ,49913 1.94455
: DATA - CA23B	ARC 14-120(CA23B)		3000 IN. XC 3000 IN. YC 7500 IN ZC	RN/L =	BETAO 12461 12008 12130	RN/L =	BETAO 11769 11866 11239	RN/L ≠	BETAO 11983 11535 .00099	RN/L	BETAO 11801 11132 10619
ATED SOURCE DATA	ARC		1339.9000 - 00000 - 190.7500	. 353/ 0	BETAC 02937 02941 02743	. 354/0	BETAC 02868 02760 02537	. 355/0	BETAC 03499 03719 03471). 356/0	BETAC 03778 03663 03708
TABULATED		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC - 213 2.313 4.259 GRADIENT	RUN NO	ALPHAC 270 2.324 4.304 GRADIENT	RUN NO.	ALPHAC 272 2 . 346 4 . 294 GRAD I ENT	RUN NO	ALPHAC 271 2 . 322 4 . 260 GRAD I ENT
MAR 76		REFEREN	5500.0000 SG 327.7800 IN 2348.0400 IN		DZ 9.664 9.916 9.803		02 15.113 14.808 14.693		02 29.891 29.979 29.891		02 44, 44 644, 799 44, 865
DATE 22 MAR 76			SREF = LREF = BREF = SCALE =								

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OCT 75)		5.000 .000. .000.												
2	DATA	STAB ELEVON BOX		CLN 02016 02057 00021		CLN 02015 02058 00018		CLN 02110 02113 00001		CLN 02145 02134 .00004		CLN 02169 +.02149		CLN 02354 02320 00015
(ANH036)	PARAMETRIC	.000 10.000 6.000		CSL .00265 .00215		CSL .00279 .00264 00006		CSL .00294 .00214 00034		CSL .00319 .00282		CSL .00346 .00252		CSL .00384 .00285 0094
2		BETA RETORER IN 10RB	.00/ 5.00	CN . 15712 . 30922 . 08039	.00/ 5.00	CN . 14175 . 33768 . 08189	00/ 2.00	CN .15863 .35030	.00/ 5.00	CN . 16917 . 36209 . 08011	00/ 5.00	CN . 18493 . 38192 . 08287	.00/ 5.00	CN .21804 .40509
(CARRIER DATA)			1. 1.	CA .04539 .03703 00442	ا. د	CA .04591 .03517 00449	i,	CA .04608 .03552 00447	1. 1.	CA . 04602 . 03498 00459	" -5.	CA .04596 .03433 00489	H .	CA . 04505 . 03354 00511
AT1 0351 (C			GRADIENT INTERVAL	PH10 .91938 .73367 09815	GRADIENT INTERVAL	PH10 .90360 .72225 07580	GRADIENT INTERVAL	PH10 .96700 .73206 09942	GRADIENT INTERVAL	PH10 .95756 .70225 10601	GRADIENT INTERVAL	PH10 . 94518 . 68639 10887	GRADIENT INTERVAL	PH10 .89724 .67676
238) 747/1		00	3.32 6	PHIC 4.52066 2.57555 -1.02807	3.31 GF	PHIC 5.13611 2.45340 -1.12130	3.30 GF	PHIC 5.37556 2.50473 -1.21489	3.30 GF	PHIC 5.32907 2.47594 -1.18471	3.29 GR	PHIC 5.25682 2.48618 -1.16554	3.29 GR	PHIC 5,50419 2,69968 -1,24576
14-120(CA23B)		39.9000 IN. XC .0000 IN. YC 90.7500 IN ZC	RN/L =	BETAO 13030 12992	RN/L =	BETAO 12648 12935 00120	RN/L =	BETAO 13656 13052	RN/L =	BETA0 13563 12677 .00368	RN/L =	BETAO 13410 12353 .00445	RN/L =	BETAO 12862 12161
ARC			10. 361/ 0	BETAC 18193 18847 00346	10. 362/ 0	BETAC 18082 18854 00322	NO. 363/ 0	BETAC 18941 19125 00078	NO. 364/ 0	BETAC 19109 19254 00060	NO. 365/ 0	BETAC 19291 19407 00049	0. 366/ 0	BETAC 20804 20777 .00012
	REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 2.302 4.194 GRADIENT	RUN NO	ALPHAC 2.012 4.405 GRADIENT	RCN N	ALPHAC 2.013 4.376 GRADIENT	RUN N	ALPHAC 2.049 4.457 GRADIENT	Z NOS	AL PHAC 2.097 4.474 GRADIENT	RUN NO.	AL PHAC 2.159 4.411 GRADIENT
	REFERE	5500,0000 5 327.7800 1 2348.0400 1		02 1.654 2.469		02 2.877 3.365		02 7.393 7.226		02 9.858 10.104		02 14.553 14.643		02 29.819 29.992
		SREF = LREF = BREF = SCALE =												

E 87	1 75)		5.000 .000 .000 .600							OCT 75)		-1.080 .000 .000 .600		
PAGE	S) (21 OCT	DATA	STAB = ELEVON = DX = MACH =		CLN 02408 02397 00005		CLN 02414 02375		CLN 02381 02353 .00012	B 0)	DATA	STAB = ELEVON = DX = MACH =		CLN 00159 00129 00129
	(ANH036)	PARAMETR1C	.000 10.000 6.000		CSL .00425 .00284 00061		CSL .00383 .00282 00042		CSL .00380 .00308 00032	(ANHO 37)	PARAME TRIC			CSL .00065 .00035 .00055
			BETA = RUDDER = 10RB = DY	10/ 5.00	CN .21780 .40927 .08256	10/ 5.00	CN . 20757 . 43272 . 09287	00/ 2:00	CN .24024 .42781 .08239			BETA RUDDER RODDER RODDER RODY	00/ 2:00	CN 06024 .08164 .24508
	0351 (CARRIER DATA)			WAL = -5.00/	CA . 04478 . 03346 00488	NAL = -5.00/	CA .04507 .03190 00543	YVAL = -5.00/	CA .04410 .03225 00520	(CARRIER DATA)			.5.	CA .04588 .04357 .03334 00333
	AT1 0351 (CA			GRADIENT INTERVAL	PH10 .90037 .70425 04456	GRADIENT INTERVAL	01H4 01029. 24069.	GRADIENT INTERVA	PHIO	AT1 0351 (C/			GRADIENT INTERVAL	PHIJ 1.12166 .82874 .67006
38	1/44/			3.29 GRA	PHIC 5.88810 2.83211 -1.31772	3.30 GRA	PH1C 5.99192 2.75051 -1.33703	3.30 GR/	PH1C 5.62690 2.73775 -1.26898	1/247			3.33 GR	PHIC 2.49361 .63611 .39023 .54099
OURCE DATA - CA23B	ARC 14-120(CA23B)		.9000 IN. XC .0000 IN. YC .7500 IN ZC	RN/L =	BETAO 12790 12616 .00075	RN/L =	BETAO 12804 12437 .00151	RN/L =	BETAO 12489 12303 .00082	14-120(CA23B)		1339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC	RN/L =	BETAO 12383 11879 11948
S	ARC		1339.9000 - 0000 190.7500	367/ 0	BETAC 21159 21604 00192	368/ 0	BETAC 21146 21307 00066	. 369/ 0	BETAC 21075 21097 00010	ARC		H H H	. 371/ 0	BETAC 02268 02549 02949
TABULATED		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 2.052 4.371 GRADIENT	RUN NO.	ALPHAC 2.015 4.439 GRADIENT	RUN NO	ALPHAC 2.140 4.416 GRADIENT		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC .521 2.297 4.335 GRADIENT
MAR 76		REFERE	5500.0000 Si 327.7800 11 2348.0400 11		02 45.057 44.937		02 50.129 50.420		DZ 62.057 61.853		REFERE	5500.0000 327.7800 2348.0400 125		02 1.955 1.879 1.932
DATE 22 M			SREF = LREF = BREF = SCALE =									SREF # LREF # BREF # SCALE #		

ARC 14-120 (CA23B) 747/1 AT1 0351 (CARRIER DATA)

CT 75)		-1.000 .000 .000 .600										
77) (08 OCT	: DATA	STAB = ELEVON = DX = MACH =		CLN 00184 00120 00137		CLN 00121 00012 00090		CLN 00119 00068 00087		CLN 00086 00048 00048		CLN 00147 00151 00137
(ANH037)	PARAMETRIC	.000 .000 .000 .000		CSL 00014 .00056 .00066		CSL 00019 .00012 .00034		CSL 00035 .00077 .00035		CSL 00021 .00005 .00021		CSL .00014 .00045 .00067
		BETA = RUDDER = 10RB = DY	00/ 2.00	CN 10928 . 09675 . 25059	00/ 5.00	CN 10351 .12077 .26602 .08141	00/ 5.00	CN 08920 .11023 .28451	00/ 5.00	CN 06671 .11763 .29133	00/ 5.00	CN -, 05280 -, 13713 -, 32413 -, 08290
(CARRIER DATA)			RVAL = -5.00/	CA .04527 .04309 .03310	RVAL = -5.00/	CA .04528 .04269 .03273 00263	RVAL = -5.00/	CA .04562 .04287 .03153	RVAL = -5.00/	CA .04587 .04305 .03151	RVAL = -5.00/	CA .04558 .04209 .02943
AT1 0351 (C			GRADIENT INTERVAL	PH10 1,27886 ,89499 ,73005 -,12483	GRADIENT INTERVAL	PHIO 1.21514 .89448 .65536	GRADIENT INTERVAL	PHIO 1.18499 87619 .68248	GRADIENT INTERVAL	PHIO 1,19552 85170 65750 -,12218	GRADIENT INTERVAL	PH10 1.19126 .87782 .66310
38) 747/1			3.32 GF	PHIC -18.87120 .53920 .40870 4.49081	3.32 GR	PH1C -5.57095 .55136 .33426 1.36990	3.31 GA	PH1C -10,99320 .42264 .32219	3.31 GR	PH1C 23.75730 .46896 .27023	3.32 GR	PH1C -29.04110 .67263 .36271 6.58687
14-120(CA23B)		9000 IN. XC 10000 IN. YC 7500 IN ZC	RN/L =	BETAO -,13684 -,12938 -,13064 .00147	RN/L =	BETAO 12654 13121 11746	RN/L =	BETAO 12574 12665 12354 .00045	RN/L =	BETAO 12958 1262 11862	RN/L =	BETAO 12696 12652 12061
ARC		1339	0. 372/ 0	BETAC 02+96 02272 03116	0. 373/ 0	BETAC 01792 02420 02543 00170	0. 374/ 0	BETAC 01856 01770 02513	0. 375/ 0	BETAC 01580 01943 02101	0 376/ 0	BETAC 02028 02769 02850 00183
	REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 073 2.415 4.372 GRADIENT	RUN NO	ALPHAC 184 2.515 4.363 GRADIENT	RUN NO	ALPHAC 096 2.401 4.474 GRADIENT	RUN NO	ALPHAC .036 2.374 4.458 GRADIENT	RUN NO	ALPHAC 037 2.359 4.506 GRADIENT
	REFERE	5500.0000 S 327.7800 1 2348.0400 1		02 3.611 3.412 3.341		02 7.238 7.611 7.497		02 10.003 9.942 10.030		02 14.990 14.729 14.795		02 29.795 29.929 30.138
		SREF = LREF = BREF = SCALE =										

PAGE 89	(08 OCT 75)	∢	STAB = -1.000 ELEYON = .000 DX = .000 MACH = .600		CLN 00194 00185 00195		CLN 00168 00195 00206 00008		CLN 00195 00180 00184	(08 001 75)	¥	17 AB = 5.000 1.EVON = 5.000 X		CLN 00290 00274 00302 00003
	(ANH037)	PARAMETRIC DATA	.000 STAB .000 ELEVG 6.000 DX .000 MACH		CSL C:		CSL		CSL C 00001 00058 00056	(ANH038)	PARAMETRIC DATA	.000 STAB .000 ELEV 6,000 DX .000 MACH		CSL 00003 000018 00004 00004
		PAR	BETA ** RUDDER ** 10RB ** DY **	/ 5.00	CN 06533 -17242 .32406 .08956	7 5.00	CN 03388 .15505 .34645 .08472	00.5	CN 03088 .16759 .34307 .08453		Aq	BETA # RUDDER # 10RB # 07	00.5 /0	CN 04877 .14601 .31015 .08274
	(CARRIER DATA)			VAL = -5.00/	CA .04468 .04052 .02981 00328	VAL = -5.00/	CA .04525 .04129 .02793 00385	1VAL = -5.00	CA .04528 .04060 .02819	(CARRIER DATA)			3VAL = -5.00/	CA . 04455 . 04295 . 03290 00266
	AT1 0351 (CA			GRADIENT INTERVAL	PH10 1.13302 1.83391 .69755	GRADIENT INTERVAL	PH10 1.08333 .88282 .65317	GRADIENT INTERVAL	PH10 1.15102 .83841 .65927 11180	AT1 0351 (CA			GRADIENT INTERVAL	PH10 1.1 63 31 .86754 .66987 11390
CA23B	1/147			3.32 GR	PHIC -14.48000 .63807 .44955 3.50822	3.31 GR	PH1C 30.86850 .76690 .44383	3.31 GR	PHIC -62.78220 .71238 .41554 14.65655	747/1		OO	3.34 GR	PH1C 37.71810 .97421 .58044 -8.55058
OURCE DATA - CA	14-120(CA238)		.9000 IN. XC .0000 IN. YC .7500 IN ZC	RN/L ≈	BETAO 12014 12302 12386 00087	EN/L =	BETAO 11717 12711 11877	RN/L =	BETAO 12245 12133 11829	: 14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L *	BETAO 12129 12271 12060
TABULATED SOURCE	ARC		= 1339 = 190	0. 377/ 0	BETAC 02469 02998 03340	0. 378/0	BETAC 02125 03099 03501	NO. 379/0	BETAC 02570 02957 03202	ARC		45 = 1339.	40. 381/ 0	BETAC 03585 03898 04440
TABU		NCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 096 2.497 4.260 GRADIENT	RUN NO	ALPHAC . 035 2.316 4.524 GRADIENT	NO.	ALPHAC 013 2.379 4.408 GRADIENT		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC . 046 2.293 4.387 GRADIENT
MAR 76		REFERENCE	5500.0000 S 327.7800 13 2348.0400 13		02 45.027 44.952 44.914		02 50.481 50.592 50.369		02 61.632 61.965 61.651		REFERE	5500.0000 5 327.7800 5 2348.0400 5		02 1.603 1.569 2.306
DATE 22 M			SREF = LREF = BREF = SCALE =									SREF # LREF # BREF # SCALE #		

DATE 22 MAR	76	TABU	TABULATED SOURCE DATA	1	CA238					PAGE	E 90
			ARC	14-120(CA23B)	747/1	AT1 0351 (CA	03SI (CARRIER DATA)	•	(ANH038	8) (08 OCT	175)
	REFERE	REFERENCE DATA							PARAMETRIC	DATA	
SREF = 550 LREF = 32 BREF = 234 SCALE =	5500.0000 S(327.7800 II 2348.0400 II	SO.FT. XMRP IN. YMRP IN. ZMRP	# 1339. # 190.	9000 IN. XC 0000 IN. YC 7500 IN ZC				BETA RUDDER I IONB I		STAB ELEVON = DX MACH	
		RUN NO	0.382/0	RN/L =	3.33 GR	GRADIENT INTERVAL	# ئ	.00/ 5.00			
	02 3.468 3.699 3.469	ALPHAC .019 2.422 4.425 GRADIENT	BETAC 04292 04300 04540 00055	BETAO 12442 12381 12016	PHIC 65.58800 1.01754 .58844 -15.15230	PHIO 1.15052 185131 .65722	CA . 04450 . 04239 . 03290 00258	CN 03663 .15769 .31758	CSL .00028 .00025 .00024	CLN 00374 00324 00321	
		RUN NO	0. 383/ 0	RN/L ≠	3.33 GR	GRADIENT INTERVAL	il.	.00/ 5.00			
ORIO	02 7.736 6.902 7.339	ALPHAC 027 2.422 4.419 GRADIENT	BETAC 03671 04018 04382 00159	BETAO 11960 12460 12334	PHIC -53,27060 .95082 .56875 12,48313	PH10 1.10916 .86512 .68592 09535	. 04479 . 04257 . 03275 00264	CN 02846 .17397 .33682 .08218	CSL .00006 .00007 00019	CLN 00299 00293 00301	
_		PUN NO	0.384/0	RN/L =	3.32 GR	GRADIENT INTERVAL	i,	.00/ 5.00			
	02 10.309 9.703 10.031	ALPHAC .047 2.409 4.489 GRADIENT	BETAC 03699 03787 04151	BETAO 12375 12099 1:816	PHIC 38,45710 ,90067 ,53038 -8,70301	PHIO 1.13445 .83505 .65168 10905	CA .04508 .04293 .03233	CN 01411 .18006 .34932 .08181	CSL 00010 .00008 .00002	CLN 00287 00274 00285	
		RUN NO	0. 385/ 0	RN/L =	3.32 GR	GRADIENT INTERVAL	я ľ	.00/ 5.00			
•	02 15.037 14.966 14.875	AL PHAC 2.191 2.495 4.418 GRADIENT	BETAC 03593 03772 03729	BETAO 11641 12284 12257 00142	PHIC -14.34110 .86659 .48407 3.40255	PH10 1.10172 184153 .68098 09268	CA . 04454 . 04262 . 03249 00251	CN 03650 .20187 .36116 .08743	00 141 00	CLN -,00294 -,00253 -,00253	
		RUN NO	0. 386/ 0	RN/L .	3.32 GR	GRADIENT INTERVAL	VAL = -5.00	00/ 5.00			
	DZ 30.004 29.816 30.280	ALPHAC 165 2.497 4.402 GRADIENT	BETAC 03289 03586 03419 00034	BETAO 12310 11997 11822	PHIC -11.30050 .82315 .44541 2.69869	PHIO 1.17505 .82081 .65465	CA . 04524 . 04229 . 03273 00263	CN . 00925 . 23089 . 38041 . 08140	.00036 .00046 .00078	. 00007 - 00272 - 00270 - 00239	

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16	1 57		5.000 .000 .600 .600							(27 T		5.000 5.000 .000 .600		
PAGE	8) (08 OCT	DATA	STAB = ELEVON = OX		CLN - 00254 - 00254 - 00254 - 000554		CLN 00283 00269 00245		CLN - 00272 - 00257	39) (08 OCT	C DATA	STAB = ELEVON = DX = MACH =		CLN 02007 02008 00000
	(ANH038)	PARAMETR1C			CSL 00008 00002 .00045		. 00033 . 00015 . 00090		CSL 00017 .00028 .00017	(ANH0 39	PARAMETR1	. 000 . 000 . 000 . 000 . 000		.00228 .00227 .00001
		_	BETA ** RUDDER ** 10RB ** DY	00.5 /	CN .04418 .24503 .41182	00.5 /0	CN .03766 .25697 .39893	0/ 5.00	CN .02070 .26101 .09089			BETA RUDDER RIORB COY	00.5 /0	CN 14889 29800 07953
	(CARRIER DATA)			WAL = -5.00/	CA .04570 .04224 .03134 00321	WAL = -5.00/	CA .04573 .04187 .03253 00295	3VAL = -5.00/	CA .04506 .04177 00124	(CARPIER DATA)			RVAL = -5.0	CA . 04328 . 03453 00466
	0351			GRADIENT INTERVAL	PH10 1,11116 ,83934 ,62394	GRADIENT INTERVAL	PHIO 1,15620 .82743 .68898	GRADIENT INTERVAL	PHIO 1.19977 7178.	AT1 0251 (C.			GRADIENT INTERVAL	PH10 .87245 .63710
CA23B	38) 747/1 AT1			3.31 GR	PHIC 25.58280 .81918 .48369 -5.90136	3.30 GR	PHIC -44.04270 .82787 .47228 10.81298	3.30 GF	PHIC -16.33250 .78499 6.47423	238) 747/1		o o	3.36 G	PHIC 4,49942 2.53815 -1.04514
DATA -	14-120(CA23B)		1.9000 IN. XC .0000 IN. YC .7500 IN ZC	RN/L =	BETAO 12025 12293 11277	EN∕L =	BETAO 12247 12127 12302	RN/L =	BETAO 12518 12084 .00164	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	BETAO 12482 11294 .00634
TED SOURCE	ARC		1339.9 0.0 190.7	387/ 0	BETAC 03347 03546 03751	. 388/ 0	BETAC 03541 03528 03528	. 389/ 0	BETAC 03365 03464 00038	ARC		# 1339. # 190.	. 391/0	BETAC 18785 18879 00050
TABULATED		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC .070 2.491 4.448 GRADIENT	RUN NO	ALPHAC 037 2.513 4.284 GRADIENT	RUN NO	ALPHAC 115 2.529 GRADIENT		REFERENCE DATA	SO.FI. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 2.388 4.263 GRADIENT
MAR 76		REFERE	5500.0000 5 327.7800 1 2348.0400 1 2318.0400		02 44.879 44.946 44.926		02 49.971 50.192 50.609		02 61.515 60.520		REFER	5500,0000 327,7800 2348,0400		02 3.148 3.390
DATE 22 M			SREF LREF BREF SCALE				ORIGINA OF POOR	Œ ? Q	PAGE R UALITY	3		SREF = LREF = BREF = SCALE =		

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(ANH039) (08 OCT 75)

DATA
CARRIER
0251
AT1
747/1
·120(CA23B)
RC 14-
4

	5.000 5.000 .000												
C DATA	STAB = ELEVON = DX = MACH =		CLN 02159 02219		CLN 02218 02257 00016		CLN 02324 02316 00004		CLN 02443 02458 00006		CLN 02459 02431 00013		CLN 0244] 0242] .00009
PARAMETR 1C	.000.010.000.000.000.000.000.000.000.00		CSL .00311 .00171 00060		CSL .00321 .00230 00038		CSL .00368 .00263 00046		CSL .00389 .00354 00014		CSL .00389 .00269 00055		CSL .00386 .00294 00040
	BETA # RUDDER # 10RB # DY	00/ 5.00	CN . 14616 . 34024 . 08360	0/ 5.00	CN .14403 .32960 .07660	.00/ 5.00	CN .17058 .35061 .07856	.007 5.00	CN . 18664 . 39477 . 08497	.007 5.00	CN .21771 .39810 .08172	0/ 5.00	CN . 21610 . 40454 . 08291
		AVAL = -5.00/	CA . 04424 . 03325 00473	3VAL = -5.00/	CA . 04486 . 03466 00421	n TU	CA . 04480 . 03431 00458	# C	CA .04518 .03285 00503	ii L	CA .04445 .03358 00493	7VAL = -5.00	CA . 04454 . 03308 00504
		GRADIENT INTERVAL	PH10 .91607 .68560 09928	GRADIENT INTERVAL	PH10 .88852 .67971 08619	GRADIENT INTERVAL	PH10 .85717 .68384 07564	GRADIENT INTERVAL	PH10 .88750 .68440 08292	GRADIENT INTERVAL	PH10 .86363 .67831 08395	GRADIENT INTERVAL	PH10 .84223 .65977 .08027
		3.34 GR	PHIC 5.32723 2.68162 -1.13959	3.34 GR	PH1C 5.81649 2.72628 -1.27561	3.34 GR	PHIC 5.66248 2.77127 -1.26160	3.33 GR	PHIC 6.17644 2.87720 -1.34699	3.33 GR	PHIC 5.88804 2.93447 -1,33798	3.33 GR	PHIC 5.94619 2.90042 -1.34005
	9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	BETAO 13097 12354 .00320	RN/L =	BETAO 12519 12231 .00119	RN/L =	BETA0 12298 12295 .00001	RN/L =	BETAO 12536 12372	RN/L =	BETAO 12330 12144 .00084	RN/L =	BETAO 12019 11875 . 00063
	1339.9000 1	. 392/ 0	BETAC 19944 20873 00400	0. 393/ 0	BETAC 20379 21043 00274	0 394/ 0	BETAC 21222 21434 00093	. 395/ 0	BETAC 22127 22565 00179	. 3967 0	BETAC 22269 22366 00044	. 397/ 0	BETAC 22107 22250 00063
REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 2.139 4.461 GRADIENT	RUN NO	ALPHAC 2.001 4.424 GRADIENT	RUN NO	ALPHAC 2.141 4.433 GRADIENT	RUN NO.	ALPHAC 2.045 4.494 GRADIENT	RUN NO	ALPHAC 2.160 4.367 GRADIENT	RUN NO	ALPHAC 2.123 4.396 GRADIENT
REFERE	= 5500.0000 = 327.7800 = 2348.0400 = 0165		02 7.312 7.376		02 9.885 10.083		02 15.083 14.830		DZ 29.781 29.790		02 44.565 44.873		02 50.286 50.569
	SREF LREF BREF SCALE												

56	1 75 1		5.000 5.000 .0000 .600										
PAGE	00 80) (DATA	STAB = ELEVON = DX = MACH =		CLN 00366 00345 00345		CLN 00381 00363 00347		CLN 00396 00369 00341		CLN 00377 00355 00320		CLN 00324 00294 00234
	CANHOLO	PARAMETRIC	000.		CSL 00011 00012 .00011		CSL 03048 .00019 .00019		CSL .00004 .00004 .00004		CSL 00011 .00022 .00031		CSL 00003 .00065 .00014
			BETA = RUDDER = 10RB = DY	0/ 5.00	CN 02135 .18288 .34984 .08434	0/ 5.00	CN 01314 .20386 .35950 .08294	00/ 5.00	CN .00435 .20503 .35816	.00/ 5.00	CN 01378 -23460 .36962 .08646	.007 5.00	CN .00947 .25061 .39347 .08661
	(CARRIER DATA)			:VAL # -5.00/	CA . 04628 . 04459 . 03425	WAL = -5.00,	CA . 04654 . 04401 . 03412 00266		CA . 04655 . 04395 . 03480 00267	il R	CA .04586 .04318 .03454	ا ا	CA .04575 .04270 .03353 00262
	A11 0251 (CA)			GRADIENT INTERVAL	PH10 1.79753 1.15912 .86840 21215	GRADIENT INTERVAL	PH10 1.74014 1.10813 .82845 50513	GRADIENT INTERVAL	PHIO 1.1279 1.12877 .83988 20634	GRADIENT INTERVAL	PHIO 1.73846 1.03612 73139	GRADIENT INTERVAL	PH10 1.68114 1.10861 .76992 20554
CA238	1/247			3.33 GRA	PHIC -84,40930 1,17152 ,62992 19,64100	3.32 GR/	PHIC -26.59500 1.05741 .63211 6.31765	3.32 GR	PHIC 63.05230 1.09000 .63994 -15.17967	3.32 GR	PHIC -15,70640 1,03042 ,60193	3.33 GR	PHIC -18.37600 .88999 .47959
SOURCE DATA - CA	14-120(CA23B)		1000 IN. XC 1000 IN. YC 1500 IN ZC	RN/L =	BETAO 12383 12449 12570	RN/L	BETAO 12340 12280 12015	RN/L =	BETAO 12556 12467 12001	RN/L =	BETAO 12009 11619 11327	RN/L =	BETAO 11880 12496 11079
-	ARC		1339.9000 20000 190.7500	0. 401/ 0	BETAC 04526 04739 04833	BETAC 04526 04739 04833 00070	BETAC 04561 04855 00062	0. 403/ 0	BETAC 04725 04658 04791	0. 404. 0	BETAC 04369 04618 04516	0. +05/ 0	BETAC 03979 03976 03620
TABULATED		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 004 2.318 4.401 GRADIENT		ALPHAC 091 2.490 4.405 GRADIENT	RUN NO	AL PHAC . 024 2.449 4.293 GRADIENT	RUN NO.	ALPHAC 155 2.568 4.303 GRADIENT	RUN NO	ALPHAC 120 2.563 4.329 GRAD1ENT
AR 76		REFEREN	5500.0000 SQ 327.7800 IN 2348.0400 IN		02 3.048 3.021 3.274		02 7.066 7.198 7.335		9.793 9.766 9.766		02 14.781 14.685 14.592		02 29.804 29.944 29.835
DATE 22 MAR			SREF = 1 LREF = SCALE = SCALE = 3										

DATE 22 MAR	1AR 76	TABUL	TABULATED SOURCE	DATA -	CA23B					PAGE	ţ,	
			ARC	14-120(CA23B)		747/1 ATI 02SI (CARRIER DATA)	ARRIER DATA		(ANHO40)	0) (08 OCT	1 75 1	
	REFE	REFERENCE DATA							PARAMETRIC	DATA		
SREF = LREF = BREF = SCALE =	5500.0000 327.7800 2348.0400	SO.FT. XMRP IN. YMRP IN. ZMRP	= 1339	.9000 IN. XC .0000 IN. YC .7500 IN ZC	00			BETA # RUDDER # 10RB # DY	0000.	STAB = ELEVON = DX = MACH =	5.000 .000 .000 .000	
		RUN NO.	. 406/ 0	RN/L =	3.33 GF	GRADIENT INTERVAL	7VAL = -5.00/	00.5.00				
	02 44.515 44.728 44.671	ALPHAC 091 2.446 4.476 GRADIENT	BETAC 03758 03906 03830 00018	BETAO 12018 11965 11246 .00163	PH1C -22.46140 -91512 -49076 -49076	PH10 1.70509 1.08198 77014 20639	CA . 04552 . 04276 . 03144 00300	CN . 02212 . 24777 . 42570 . 08839	.00001 .00010 .00056	CLN 00298 00278 00239		
			ARC	14-120(CA23B)	747/1	ATI 0251 (CARRIER	ARRIER DATA)		(ANH041)	1) (08 OCT	1 75 1	
	REFEI	REFERENCE DATA							PARAMETRIC	DATA		
SREF = LREF = BREF = SCALE =	5500.0000 327.7800 2348.0400	SQ.FT. XMRP IN. YMRP IN. ZMRP	# 11 11	339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC				BETA = RUDDER = 1 ORB = DY	0000.	STAB = ELEVON = DX = MACH =	5.000 .000 .500	
		RUN NO.	. 411/0	RN/L =	2.97 GR	GRADIENT INTERVAL	TVAL = -5.00/	00/ 5.00				
	02 3.328 3.325	ALPHAC 2.137 4.298 GRADIENT	BETAC 03541 03664 00057	BETAO 09515 09550	PHIC .94918 .48885	PH10 .88790 .66669	CA . 04425 . 03413 00468	CN .15651 .33927 .08458	CSL .00002 .00009	CLN -,00339 00331		
		RUN NO	. 412/ 0	RN/L =	2.96 GR	GRADIENT INTERVAL	WAL = -5.00/	10/ 5.00				
	02 6.838 7.184	ALPHAC 2.085 4.439 GRADIENT	BETAC 03560 03628	BETAO 09548 09540	PH1C .97846 .46870 21656	PP10 . E9942 . E5598 10342	CA . 04470 . 03336 00482	CN .17465 .35990 .07870	CSL 00019 .00032	CLN 00354 00326		
		RUN NO.	. 413/ 0	RN/L =	2.98 GR	GRADIENT INTERVAL	NAL = -5.00/	10/ 5.00				

CLN -.00336 -.00319

CSL .00066 .00074 .00004

CN .18802 .36342 .07790

CA .04382 .03316

PH10 .86976 .65318 -.09618

PHIC .86236 .44953 -.18334

BETAO -.09512 -.09551 -.00018

BETAC -.03337 -.03503 -.00074

ALPHAC 2.218 4.469 GRADIENT

9.770 9.770 9.780

6	175)		5.000 5.000 5.000							OCT 75 1		5.000 5.000 .300													
PAGE	(08 OCT	DATA	STAB # ELEVON # DX # MACH #		CLN 00342 00305		CLN 00293 00269		CLN 00270 00260	08	DATA	STAB = ELEVON = DX = MACH =		CLN 00334 00315		CLN 00313 00344 00015									
	(ANHO+1)	PARAMETRIC	0000		CSL 00013 .00036 .00020		CSL .00011 .00066 .00025		CSL .00064 .00065	(ANHO42)	PARAME TRIC			CSL 00008 00001		CSL .00073 .00038 00017									
			BETA = RUDDER = 10RB = DY	0/ 5.00	CN . 18170 37930 . 18050	0/ 5.00	CN . 22046 . 39953 . 08140	.007 5.00	CN .23787 .41012			BETA = RUDDER = 1CRB = DY	00/ 5.00	CN .18514 .34643 .08015	00/ 5.00	CN 21072 .36398 .07454									
	(CARRIER DATA)			VAL = -5.00/	CA .04479 .03274 00491	VAL5.00	CA .04356 .03164 00542	⊪	CA .04273 .03157 00528	(CARRIER DATA)			NAL = -5.00/	CA .04639 .03627 00503	TVAL = -5.00	CA .04584 .03530 00512									
	0251			GRADIENT INTERVAL	PH10 .94498 .69804 10060	GRADIENT INTERVAL	PH10 .89338 .66870 10214	GRADIENT INTERVAL	PHIO .89411 .64395 11826	AT1 0251 (CA			GRADIENT INTERVAL	PH10 .98557 .73034 12683	GRADIENT INTERVAL	PHIO .92205 .71971									
£	3) 747/1 ATI			2.97 GRA	PHIC .99901 .44801 22448	2.97 GRA	PH1C .82645 .41654 18633	2.97 GRA	76327 .76333 .42333 16070	. 747/1		·	1.98 GR/	PHIC .43017 .23072 09913	1.98 GR/	PHIC .39307 .23609 -									
DATA - CA23B	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	RN/L =	BETAO 09972 10173 00082	RN/L =	BETAO 09737 09720	RN/L =	BETAO 09702 09264 .00207	14-120(CA23B)		9000 IN. XC 3000 IN. YC 7500 IN ZC	RN/L =	BETAO 10574 10352	RN/L =	BETAO 10101 10423 00157									
TABULATED SOURCE	ARC		SO.FT. XMRP = 1339.9 IN. YMRP = .0 IN. ZMRP = 190.7	T. XMRP = 1 YMRP = ZMRP =	71. XMRP = 1 YMRP = ZMRP = RUN NO. 414	10 H 10	10 H 01	1339. = 190.	10 H 61		10 H H	# H #	± ±	BETAL 03463 03469 00003	0. 415/0	BETAC 03194 03206 00006	0. 416/0	BETAC 02950 03196	ARC		XMRP = 1339.9000 YMRP = .0000 ZMRP = 190.7500	0. 421/ 0	BETAC 01658 01698	NO. 42	BETAC 01571 01790 00106
		REFERENCE DATA				RUN NO.	ALPHAC 1.986 4.441 GRADIENT RUN NO	2 2		ALPHAC 2.214 4.330 GRADIENT		REFERENCE DATA	SQ.FT. XMR IN. YMR IN. ZMR	RUN NO	ALPHAC 2.209 4.221 GRADIENT	RUN	ALPHAC 2.291 4.347 GRADIENT								
MAR 76		REFEREN	5500.0000 SC 327.7800 IN 2348.0400 IN		02 14.789 14.819		02 29.638 29.826		70 44.44 44.694		REFERE	5500.0000 S 327.7800 1 2348.0400 1		02 3.128 3.123		02 7.085 7.303									
DATE 22 M			SREF = 1 LREF = 5 BREF = 5 SCALE = 5		•							SREF LREF BREF SCALE													

E 96	1 75)		5.000 5.000 3000 3000								
PAGE	(08 OCT 75	: DATA	STAB ELEVON # DX MACH #		CLN 00334 00306 00313		CLN 00319 00307 .00005		CLN 00293 00260		CLN 00263 00230
	(ANHO42)	PARAMETRIC	 0000. 0000.		CSL - 00025 - 00056 - 00038		CSL .00020 .00016		CSL .00021 00007 00013		CSL -,00005 .00036 .00020
			BETA = RUDDER = 10RB = DY	0/ 5.00	CN . 19880 . 36855 . 07833	0/ 5.00	CN .21359 .38437 .08181	0/ 5.00	CN . 22456 . 39944 . 08324	0/ 5.00	CN . 24004 . 39671 . 07590
	ARRIER DATA			WAL = -5.00/	CA .04639 .03476 00536	VAL = -5.00/	CA .04606 .03422 00567	VAL = -5.00/	CA .04576 .03389 00565	VAL = -5.00/	CA .04482 .03247 00599
	747/1 ATI 02SI (CARRIER DATA)			GRADIENT INTERVAL =	PH10 .95456 .68472 12452	GRADIENT INTERVAL =	PH10 .94742 .70320 11698	GRADIENT INTERVAL	PH10 .95078 .70620 11641	GRADIENT INTERVAL	PH10 .90420 .69668
38				1.98 GRA	PHIC .44607 .21396 10711	1.98 GRA	PHIC .41472 .22551 09063	1.97 GRA	PHIC .41379 .21265 09574	1.97 GRA[PHIC .39313 .1938909653
SOURCE DATA - CA23B	ARC 14-120(CA23B)		3000 IN. XC 1000 IN. YC 1500 IN ZC	RN/L #	BETAO 10209 09942	RN/L =	BETAO 10326 10167 .00077	RN/L =	BETAO 10294 10150	RN/L =	BETAO 09798 09990 00093
	ARC		. 1339.9000 	. 423/ 0	BETAC 01697 01622 .00035	0 /424 .	BETAC 01640 01712 00035	. 425/ 0	BETAC 01582 01592 00004	. 426/ 0	BETAC 01510 01442
TABUL ATED		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 2.180 4.347 GRADIENT	RUN NO.	AL PHAC 2.265 4.354 GRAD IENT	RUN NO.	ALPHAC 2.191 4.292 GRADIENT	RUN NO.	ALPHAC 2.202 4.266 GRADIENT
1AR 75		REFERE	5500.0000 St. 327.7800 11 2348.0400 11 .0125		0.285 9.285 9.970		DZ 14.488 14.575		02 29.804 29.724		02 44.766 44.688
UAIL 22 MAR 76			SREF = LREF = BREF = SCALE =								

PAGE 97	(08 OCT 75)	ATA	STAB = -1.000 MACH = .500																				
	(BNH004)	PARAMETRIC DATA	000 ·																				
		PARA	RUDDER =	5.00	CPSB2	. 08562	. 08387	. 09591	. 08374	. 08057	98480	. 08138	. 09595	.07957	. 08388	.08505	. 08062	. 09595	. 08622				
			RUDI	-5.00/	CPSB1	01546	01962	00630	01713	01541	00939	01270	+5000 ·	01488	01055	01304	01016	.00170	00642				
				INTERVAL =	CPCC	02663	03132	01759	02858	02850	02643	03114	01463	02742	0284 2	03335	03072	02281	~. 02845				
	747/1 AT1			GRADIENT INTERVAL	XYCP	-1.25656	76289	1.484.1	35535	25950	22046	17503	15610	14431	14223	14268	12300	10308	06339				
- CA23B						IN. XC IN. YC IN ZC	L = 3.40	XZCP		62283	74482	94338	-1.57780	-12.09710	1.17060	.45057	. 23009	.10305	.04378	.01847	00350	.00293	
SOURCE DATA - CA23B	ARC 14-120(CA23B)		1 339.9000 1 1 0000 . 1 000.7500 1	41/ 0 RN/L	AL PHAC	-5.187	-3.684				•	1.254	2.216	3.190	4.233	5.283	6.213	7.193	8.200				
TABULATED		ITA	XMRP = ZMRP =	RUN NO.	ZO	131.927	131.734	131.595	131.467	131.339	131.218	131.073	130.941	130.802	130.668	130.501	130.357	130.219	130.047				
		REFERENCE DATA	1000 SQ.FT. 7800 IN. 1400 IN.																				

DATE 22 MAR 76

DRIGINAL FAGE IS DE POOR QUALITY

CPSB2 11684 110628 105451 101631 11018 111439 111439 111863 11863 5.00 CPSB1 - 01828 - 01514 - 01423 - 00482 - 00482 - 00623 - 00648 - 00668 - 00668 - 00668 -5.00/ GRADIENT INTERVAL CPCC - 01669 - 02099 - 02099 - 02099 - 02099 - 02081 - 02081 - 02081 - 02081 - 02081 - 02081 - 02081 - 020830 - 020800 -73389 7.52945 7.28776 7.28072 7.28678 7.28666 7.28666 7.28666 7.28666 7.28666 7.28666 7.28666 7.28666 7.28666 7.28666 7.286666 7.28666 7.28666 7.28666 7.28666 7.28666 7.28666 7.28666 7.286666 7.28666 7.28666 7.28666 7.28666 7.28666 7.28666 7.28666 7.286666 7.286 3.36 . 13526 . 32773 . 32773 . 32773 . 56256 . 5 98906 . 1 02481 . 1 02 RN/L = AL PHAC -5.190 -3.773 -2.856 -1.854 - 858 1.191 2.190 3.207 4.111 5.180 6.172 7.226 8.205 6RADIENT 51/0 130.569 130.436 130.158 130.031 120.031 129.596 129.434 129.329 129.085 128.889 SEN NO.

08 OCT 75 STAB ELEVON DX MACH PARAMETRIC DATA (BNH008) BETA RUDDER 10RB DY 747/1 AT1 0251 (CARRIER DATA) ARC 14-120(CA23B) 1339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC XMRP YMRP ZMRP REFERENCE DATA 5500.0000 SO.FT. 327.7800 IN. 2348.0400 IN. SREF LREF BREF SCALE

CPSB2 .08524 .08761 .08521 5.00 5.00 -.04936 -.03379 -5.00/ -5.00/ GRADIENT INTERVAL CPCC -.03588 -.03274 -.02390 GRADIENT INTERVAL XYCP --27822 --24733 --19305 -02056 3.35 RN/L = 3.35 -1.99713 3.45133 73920 70049 RN/L = ALPHAC . 192 2. 364 4. 308 GRADIENT 81/0 82/0 DZ 4.365 2.954 3.443 RUN NO. RUN NO.

CPSB2 . 09844 . 09409 . 00118 CPSB1 -.03768 -.03836 -.02494 CPCC -.02428 -.03058 -.02042 XYCP -.29174 -.17758 -.14266 xZCP -1.73392 2.27330 .59772 .56606 ALPHAC -, 126 2, 378 4, 361 GRADIENT 02 6.994 7.54! 7.335

SREF LREF BREF SCALE

5.000 (08 OCT 75 PAGE STAB ELEVON DX MACH PARAMETRIC DATA (BNH008) 6.000 CPSB2 .08269 .09043 .09053 CPSB2 .09867 .10052 .09446 CPSB2 .09741 .09307 .09652 CPSB2 .08358 .09517 .09433 5.00 BETA RUDDER 10RB DY CPSB1 -.02365 -.02368 -.01217 CPSB1 -.03487 -.01775 -.01437 .00478 CPSB1 -.04507 -.03185 -.02563 CPSB1 -.01592 -.00367 -.01320 -5.00/ -5.007 -5.00/ -5.00/ ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) GRADIENT INTERVAL INTERVAL CPCC -.03479 -.02201 -.02724 .00182 CPCC -.03907 -.01881 -.02049 ..00445 GRADIENT INTERVAL CPCC -.02151 -.02312 -.02148 -.00002 INTERVAL CPCC -.01885 -.02555 -.01776 GRADIENT GRADIENT xYCP -.29271 -.16558 -.:4098 XYCP -.32426 -.18362 -.15538 XYCP -.30838 -.17669 -.15162 XYCP -.29851 -.18214 -.13505 RN/L = 3.35 = 3.35 RN/L = 3.35 XZCP -1.97441 -69134 -24050 -53617 -1.77398 1.82848 53863 .55126 xZCP -1.93432 1.33466 1.1399 .41399 XZCP -2.03844 .88985 .3099**3** .57791 1339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC RN/L = FN/L AL PHAC -.141 2.414 4.401 GRAD IENT AL PHAC -, 065 2,496 4,342 GRAD I ENT AL PHAC - .014 2 .461 4 .492 GRAU IENT AL PHAC - . 028 2 . 464 4 . 306 GRAD IENT 0 /18 85/0 0 /98 83/0 D2 29.536 29.860 29.902 D2 44.873 44.666 45.029 DZ 14.752 15.063 15.188 02 9.751 9.637 9.522 SE NO. XMRP YMRP ZMRP RUN NO. PEN NO. RUN NO REFERENCE DATA 50.FT. 5500.0000 327.7800 2348.0400

CPSB2 .08998 .10023 .08084

CPSB1 -.02928 -.02001 -.02568

CPCC -.02771 -.02134 -.02937

xYCP -.30290 -.1825 -.15036

x2CP 2.272.5-69563 .59563 .59955

DZ 50.039 50.412 50.166

-5.00/

INTERVAL

GRADIENT

RN/L = 3.34

87/0

SUN NO.

0CT 75)		5.000								
90	DATA	STAB # ELEVON # DX # MACH #								
(BOOHNB)	PARAMETR1C									
	PAR	# # # # @S	5.00	CPSB2 .08585 .08029 .09256	5.00	CPSB2 .08788 .09456 .08784	5.00	CPSB2 .10032 .09358 .09423	5.00	CPSB2 .08435 .09638 .09390
DATA)		BETA RUDDE 10RB DY	-5.00/	CPSB1 03344 03334 01913	-5.00/	CPSB1 03339 02488 02077 .00293	-5.00/	CPSB1 02049 02376 01277	-5.00/	CPSB1 03362 02092 01419
SI (CARRIER			GRADIENT INTERVAL .	CPCC 03238 03387 02261	GRADIENT INTERVAL *	CPCC 02838 02302 01970	INTERVAL =	CPCC 01836 02456 01516	INTERVAL =	CPCC 03467 02544 01927
747/1 ATI 02SI (CARRIER DATA)			GRADIENT	XYCP 30703 21619 15127	GRADIENT	XYCP -,37537 -,22391 -,16163 .04975	GRADIENT	XYCP 38069 21978 15664	GRADIENT	XYCP 32952 20988 16592
ARC 14-120(CA23B) 7		N. XC IN. YC	RN/L = 3.35	XZCP -2.14495 4.86789 .97526	RN/L = 3.35	x2CP -1.83377 3.48849 .86073	RN/L = 3.35	x2CP -1.77825 2.34671 .69382 .63447	RN/L = 3.35	XZCP -2.13156 1.23148 .41937 .62834
ARC 14-1		1339.9000 0000 190.7500	91/ 0 RN	AL PHAC .274 2.380 4.334 GRADIENT	92/ 0 FN	ALPHAC 015 2.498 4.339 GRADIENT	93/ 0 RN	ALPHAC 101 2.534 4.322 GRADIENT	94 0 RN	AI. PHAC 027 2.539 4.365 GRADIENT
	ATA	XMRP YMRP ZMRP = =	RUN NO.	02 8.075 7.276 7.800	RUN NO.	02 9.930 10.158 9.843	RUN NO.	02 14.862 14.490 15.108	RUN NO.	02 29.926 29.957 29.720
	REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.								

CPSB2 .08796 .08653 .09827

CPSB: -.02998 -.03213 -.01200

CPCC -.03025 -.03450 -...R92

XYCP -.35302 -.19860 -.15570

DZ 44.465 44.798 44.826

-5.00/

GRADIENT INTERVAL =

RN/L = 3.34

RUN NO.

101	1 57		5.000 5.000 .600			. 27. 1		5.000 5.000 .000 .600						
PAGE	3) (08 OCT	DATA	STAB # ELEVON # DX # MACH #			0) (08 OCT	DATA	STAB = ELEVON = DX = MACH =						
	(600HNB)	PARAMETR1C	000 	.00	CPS82 .08209 .09574 .09807	(BNH010)	PARAMETRIC		.00	CPSB2 .19015 .13437 .13099 01449	.00	CPSB2 .12879 .12422 1.08143	.00	CPSB2 .11246 .1200 5 .12224 .00218
	DATA		BETA RUDDEI 10RB DY	-5.00/ 5	CPSB1 03097 01659 00864	DATA		BETA RUDDER 10RB DY	-5.00/ 5.	CPSB1 .04405 .00540 .00101	-5.00/ 5.	CPSB1 00979 00598 00325	-5.00/ 5	CPSB1 01907 00756 00147
	(CARRIER DATA)			INTERVAL =	CPCC 03413 02271 01395	SI (CARRIER			INTERVAL "	CPCC .06228 .01503 .01041	INTERVAL	CPCC .00114 .00466 .00678	INTERVAL	CPCC 00885 .00438 .00329
	747/1 AT1 0251			GRADIENT	xYCP 29261 18452 15773	747/1 AT1 0251			GRADIENT	XYCP 29482 22808 17954	GRADIENT	xYCP 28557 20748 15890	GRADIENT	xYCP 27493 21615 16188
- CA238	14-120(CA23B) 74		IN. XC IN. YC IN ZC	L * 3.35	XZCP -2.20041 .79682 .27351 .59322	14-120(CA23B) 7		IN. XC IN. YC IN ZC	/L = 3.39	XZCP 1.14846 71427 44501	/L = 3.38	XZCP .78970 .76588 48769	RN/L = 3.37	xzcP 1.85197 85413 54768 54938
SOURCE DATA	ARC 14-12		1 339.9000 1 0000 1 190.7500	96/ 0 RN/L	AL PHAC 078 2 . 550 4 . 393 GRAD I ENT	ARC 14-16		1339.9000 .0000 190.75001	101/ 0 RN/L	ALPHAC 132 2.303 4.270 GRADIENT	102/ 0 RN/L	AL PHAC 206 2 .335 4 .346 GRAD LENT	103/ 0 RN	AL PHAC - 178 2.367 4.381 GRADIENT
TABULATED		ITA	XMRP YMRP ZMRP	RUN NO.	02 50.555 50.407 50.452		ATA	XMRP = ZMRP =	RUN NO.	02 6.742 7.349 7.463	RUN NO.	02 10.009 10.088 10.447	RUN NO.	DZ 15.028 14.812 15.043
DATE 22 MAR 76		REFERENCE DAT	SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125				REFERENCE DATA	SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125						

(BNH010) (08 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

0.0000000000000000000000000000000000000		STAB = 5.000 ELEVON = 5.000 DX = .000 MACH = .600		t					(08 OCT 75)	DATA	STAB = -1.000 ELEVON = 5.000 DX = .000 MACH = .600		
		.000 .000 .000 .000							(BNH011)	PARAMETRIC	0000.		
ď		BETA = RUDOER = 10RB = 0Y = 10RB	5.00	CPSB2 .12387 .12317 .12658	5.00	CPSB2 .11276 .13221 .12428	5.00	CPSB2 .10782 .12849 .12372		PA	BETA = RUDDER = 10RB = DY	5.00	CPSB2 .11837 .08733 .09383
		8E TA RUDOI 10RB DY	-5.00/	CPSB1 00083 00153 00384	-5.007	CPSB1 01560 .00490 .00066	-5.00/	CPSB1 01711 .00385 .00409	DATAI		BE RUD	-5.00/	CPSB1 02531 04870 03599 00258
			INTERVAL =	CPCC .00685 .00404 .00729	INTERVAL =	CPCC 00905 .00915 .00678	INTERVAL =	CPCC - 01210 . 00917 . 00569 . 00418	SI (CARRIER			INTERVAL .	CPCC 01019 03813 02662 00406
			GRADIENT	XYCP 27220 19607 01687	GRADIENT	XYCP 28951 22429 18652	GRADIENT	xycP 29068 23280 19101	747/1 AT1 0251			GRADIENT	XYCP 23420 15318 11360 .02875
		. ×C . ×C . × ×C . × ×C	1. 3.36	xZCP 23.92230. 95131 62146 -5.59431	1 = 3.35	XZCP -9.92696 94784 63474 2.11090	L = 3.34	XZCP -8.51375 94165 63497 1.81580	;4-120(CA23B) 7		IN. XC IN. YC	L = 3.34	XZCP -2.04310 1.42806 .39107 .59592
		1339.9000 .0000 190.7500	104/ 0 RN/L	ALPH.C 108 2.360 4.407 GRADIENT	105/ 3 RN/L	ALPHAC 111 2.422 4.429 GRADIENT	105/ 0 RN/L	ALPHAC 076 2.472 4.4:5 GRADIENT	ARC :4-12		1339.9000 13000 10057.081	1117 0 RN/L	ALPHAC .047 2.270 4.264 6PAD:ENT
DATA	!	XMRP YMRP ZMRP # #	RUN NO.	02 29.734 30.254 29.860	RUN NO. 1	02 44.868 45.183 45.129	RUN NO.	50 50.418 50.480 50.477		ATA	XMRP YMRP ZMRP ZMRP	RUN NO.	02 3.15; 3.118 3.528
REFERENCE DATA		= 5500.0000 50.FT. = 327.7800 IN. = 2348.0400 IN. E = .0125								REFERENCE DATA	= 5500.0000 SQ.FT. = 327.7800 IN. = 2348.0400 IN.		
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1AR 76	TABULATED	SOURCE DATA	A - CA23B						ď	PAGE 103
		ARC 14-1	14-120(CA238) 7	747/1 ATI 0251	1 (CARRIER	DATA		(BNH011)	80	0CT 75 1
REFERENCE DATA	ATA						PARA	PARAMETRIC	DATA	
5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.	XMRP YMRP # ZMRP #	1339.9000 .0000 190.7500	IN. XC IN. YC IN. ZC			BETA RUDOS IORB DY	BETA ** RUDDER ** +	.000	STAB = ELEVON = DX = MACH =	5.000
	RUN NO. 1	112/ 0 RN	RN/L = 3.35	GRADIENT	INTERVAL =	-5.00/	5.00			
	02 7.547 7.199 7.175	ALPHAC 170 2.385 4.257 GRADIENT	xzcp -1.95675 1.03632 .33629	XYCP 24365 15072 12202	CPCC 02580 02544 02656 00020	CPSB1 02926 03413 03084	CPSB2 .11209 .09675 .09746			
	RUN NO.	113/ 0 FN	FN/L = 3.35	GRADIENT	IN"ERVAL =	-5.00/	5.00		•	
	9.751 9.751 9.781 9.991	ALPHAC 120 353 2.353 4.419 GRADIENT	x2CP -2.19015 1.00476 29553	×YCP 23829 16284 12562	CPCC 03218 02432 02498	CPSB1 04117 03075 02632	CPSB2 .09891 .09885 .09666			
	RUN NO.	114/ 0 R	RN/L = 3.35	GRADIENT	INTERVAL *	-5.00/	5.00			
	02 14.874 14.967 14.923	ALPHAC 041 2.414 4.392 GRADIENT	x2CP -2.32167 .86275 .26633	XYCP 25371 16462 13040	CPCC 02620 02768 03169	CPSB1 03314 03141 03038	CPSB2 .10061 .09520 .08747			
	RUN NO.	115/ 0 Rt	RN/L = 3.35	GRADIENT	INTERVAL .	-5.00/	5.00			
	02 29.907 29.803 29.693	ALPHAC 177 2.432 4.435 GRADIENT	XZCP -2.35984 .63031 .18441	XYCP 27423 15731 13475	CPCC 02513 02572 00395	CPSB1 02142 01900 01703	CPSB2 .10838 .10192 .09506			
	RUN NO.	116/0 R	RN/L = 3.34	GRADIENT	INTERVAL =	-5.00/	5.00			
	02 44,786 45,057 455	ALPHAC 134 2.347 4.450 GRAD!ENT	x2CP -3.18191 54219 15130 75002	XYCP 26560 15687 13512	CPCC 019:0 01702 02062	CPSB1 01697 02021 01394	CPSB2 . 10062 . 09935 . 09970 00021			

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PAGE 104 (08 OCT 75)

(BNH012)

PARAMETRIC DATA	3 = .000 STAB = -1.000 8 .000 ELEVON = 5.000 8 6.000 DX = 5.000 MACH = .600	00	CPSB2 .10808 .08912 .09574 00288	01	CPSB2 09088 09803 09319 00059	Q	CPSB2 .10498 .09840 .09544	(BNH013) (08 OCT 75)	PARAMETRIC DATA	# .000 STAB # 5.000 # .000 ELEVON # 5.000 # 6.000 DX # .000	0	CPSB2 .12234 .11135 .09898 00555
	BETA RUDDER 10RB DY	-5.00/ 5.00	CPSB1 02751 03560 02074 .00138	-5.00/ 5.00	CPSB1 04117 02233 02080	-5.00/ 5.00	CPSB1 02674 02530 01699	DATAI		BETA RUDDER IORB DY	-5.00/ 5.00	CPSB1 01746 02145 01928
		T INTERVAL =	CPCC 02539 03158 02154	T INTERVAL =	CPCC 03645 01860 02267	INTERVAL =	CPCC 01981 0221 01512	0251 (CARRIER			INTERVAL =	CPCC 00015 00433 00100
		GRADIENT	XYCP 25195 18771 14874 .02422	GRADIENT	XYCP 27652 19307 14172	GRADIENT	XYCP 31724 18664 13552 .03989	747/1 AT1 02			GRADIENT	XYCP 09399 09033 05917 00825
	IN. XC IN. YC IN ZC	RN/L = 3.35	x2cP -2.04595 2.41587 .71203	RN/L = 3.34	x2CP -2.23629 1.85761 .55857	RN/L = 3.34	XZCP -1.98039 1.57283 .48588 .57332	ARC 14-120(CA238)		IN. XC IN. YC IN ZC	/L = 3.34	xZCP 2.53679 95078 54726
	1339.9000 .0000 190.7500	121/0 RA	ALPHAC .038 2.411 4.319 GRADIENT	122/ 0 FN	ALPHAC 026 2.399 4.448 GRADIENT	123/ 0 RN	AL PHAC 156 2.439 4.458 GRADIENT	ARC 14-1		1339.9000 .0000 190.7500	1317 0 RN/L	ALPHAC .127 2.255 4.338 GRADIENT
DATA	XMRP * ZMRP :	RUN NO.	DZ 3.209 3.176 3.398	RUN NO.	02 7.586 7.752 7.261	RUN NO.	02 10.180 9.988 10.110		DATA	. YMRP = ZMRP =	RUN NO.	DZ 3.093 3.006 3.460
REFERENCE DAT	SREF = 5500.0000 SQ.FT LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125								REFERENCE DATA	SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125		

CA23B
DATA -
ABULATED SOURCE
TABU
R 76

PAGE 105	0CT 75)		.v.v. 0000.00										
a.	80)	DATA	STAB ELEVON BOX										
	(BNH013)	PARAMETRIC	ER * * * * * * * * * * * * * * * * * * *	00	CPSB2 .10594 .11776 .10886	5.00	CPSB2 .10866 .11485 .11751 .00194	5.00	CPSB2 .10953 .11419 .11554	5.00	CPSB2 .12270 .11788 .10621	5.00	CPSB2 .11923 .11819 .12050
	DATA		BETA RUDDER TORB DY	-5.00/ 5	CPSB1 02835 01379 01460	-5.00/	CPSB1 02228 01386 00395	-5.007	CPSB1 02172 01494 00584 .00339	-5.007	CPSB1 00382 00934 01193	-5.00/	CPSB1 00486 00576 .00129
	ATI 0251 (CARRIER DATA)			INTERVAL =	CPCC 01656 00215 00160	INTERVAL =	CPCC 01184 .00105 .00533	INTERVAL =	CPCC 00860 00246 .00556	INTERVAL	CPCC -,00084 -,000899 -,00307 -	INTERVAL	CPCC .00356 .00211 .00643
	747/1 ATI 029			GRADIENT	XYCP 11608 07588 0520	GRADIENT	XYCP 14767 08322 06337	GRADIENT	xYCP 15620 10235 07660	GRADIENT	xYCP 22582 17646 15307	GRADIENT	XYCP 25732 18922 16514 .02065
- CA23B			IN. XC IN. YC IN ZC	L = 3.34	XZCP 2.21846 97219 58027	L = 3.33	x2cP 2.29280 95664 59834	'L = 3.35	xZCP 4.55151 -1.00949 61710	1. 3.35	XZCP -12.08780 -1.00218 66050 2.64919	/L = 3.35	xZCP -6.51391 97243 65251
SOURCE DATA	ARC 14-120(CA23B)		1 339.9000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	132/ 0 RN/L	ALPhaC - 139 2.360 4.367 GRADIENT	133/ 0 RN/L	ALPHAC 237 2.407 4.371 GRADIENT	134/ 0 RN/L	ALPHAC 191 2.4.11 4.44.1 GRADIENT	135/ 0 RN/L	ALPHAC 063 2.435 4.393 6RADIENT	136/ 0 RN/L	AL PHAC 049 2.450 4.474 GRADIENT
TABULATED		ATA	XMRP TAMES TAMES THE TAMES	RUN NO.	02 7.217 7.234 7.262	RUN NO.	DZ 10.116 9.960 9.890	RUN NO.	02 15.175 14.756 15.038	RUN NO.	02 30.192 29.830 29.948	RUN NO.	02 44.708 44.452 44.667
DATE 22 MAR 76		REFERENCE DATA	SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125										

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00	C DATA	STAB # ELEVON # DX # MACH #			14) (08 OCT	C DATA	STAB ELEVON BOX MACH						
(BNH013)	PARAMETRIC	.000.			(BNH014)	PARAMETRIC	.000 .000 6.000						•
	PAR	7A 2006-R # # R	5.00	CPSB2 .11979 .11946 .11679		PAR	11 12 14 14 14 14 14 14 14 14 14 14 14 14 14	5.00	CPSB2 .01387 .01516	5.00	CPSB2 .00723 .03271	5.00	CPSB2 .00712 .02610 .00773
R DATA)		88. 100.70	-5.00/	CPSB1' -,00744 -,00315 -,00463	R DATA)		BETA RUDDE 10RB DY	-5.00/	CPSB1 01522 01332	-5.007	CPSB1 -,02963 .00209	-5.007	CPSB1 02851 00593
251 (CARRIE			I INTERVAL	CPCC . 00043 . 01011 . 00594 . 00132	OZSI (CARRIER			INTERVAL	CPCC 01522 01821 00154	INTERVAL	CPCC 02696 00475 00938	INTERVAL	CPCC 03092 01136
747/1 ATI OZSI (CARRIER DATA)			GRADIENT	XYCP 25222 19360 16352 .01976	747/1 AT1 02			GRADIENT	XYCP .01211 .01242 .00016	GRADIENT	XYCP 00588 .01666	GRADIENT	XYCP .02818 .01674 00456
14-120(CA23B) 7		IN. XC IN. YC IN ZC	RN/L = 3.35	xzcP -6.77468 97888 64985	ARC 14-120(CA238) 7		IN. XC IN. YC IN ZC	RN/L = 3.33	XZCP 87316 51937 .18178	RN/L = 3.32	XZCP -1.03089 55926 .19920	RN/L = 3.32	XZCP -1.06536 57681
ARC 14-		. 1339.9000 . 0000 . 190.7500	137/ 0 RN	ALPHAC 057 2.433 4.464 GRADIENT	ARC 14-1		1339.9000 .0000 190.7500	141/0 RN	ALPHAC 2.292 4.239 GRADIENT	142/ 0 RN	ALPHAC 1.933 4.300 GRADIENT	143/ 0 RN	ALPHAC 1.946 9.403 GRADIENT
	DATA	XMRP YMRP ZMRP	RUN NO.	02 50.164 50.275 50.038		DATA	XMRP YMRP ZMRP	RUN NO.	02 3.324 3.528	RUN NO.	02 7.340 7.097	RUN NO.	02 10.137 9.825
	REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.				REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN. .0125						
		SREF "LREF" BREF "SCALE"					SREF = LREF = BREF = SCALE =						

DATE 22 MAR

(58 OCT 75)

(BNH015)

ARC 14-120(CA23B) 747/1 ATI 02SI (CARRIER DATA)

	5.900 5.000 10.000												
C DATA	STAB = ELEVON = DX MACH =												
PARAMETR1C													
PAR	0 W u x	5.00	CPSB2 .02509 .03375	5.00	CPSB2 .02998 .03318	5.00	CPSB2 .03037 .05245	5.00	CPSB2 .03496 .05382 .00772	5.00	CPSB2 .04747 .05698 .00394	5.00	CPSB2 .03849 .03879
	BETA RUDDI 10RB DY	* -5.00/	CPSB1 00984 00312	-5.00/	CPSB1 00233 00644 00170	-5.00/	CPSB1 02123 00338	-5.00/	CPSB1 02216 .00089	-5.00/	CPSB1 00400 .00086	* -5.00/	CPSB1 01735 01237
		GRADIENT INTERVAL	CPCC 00794 00855	INTERVAL	CPCC 00477 00698 00091	INTERVAL	CPCC 02230 00555	INTERVAL	CPCC 02001 00559	INTERVAL	CPCC 00915 00131	INTERVAL	CPCC 02298 01558
		GRADIENT	XYCP 03198 05011 00929	GRADIENT	XYCP 05109 05444 00138	GRADIENT	XYCP 08147 06213	GRADIENT	XYCP 20731 16204 .01852	GRADIENT	XYCP 22047 17140 .02032	GRADIENT	XYCP 23542 17724 .02466
	IN. XC IN. YC	3.30	x2cP 59750 38290	. = 3.29	xZCP 73653 42530	. = 3.29	x2CP 84287 48869 .14651	3.29	xzcP 99197 58576 .16618	3,29	XZCP -1.02843 61912 .16944	3.29	XZCP -1.04921 62540 .17963
	1339,9000 IN ,0000 IN 190,7500 IN	151/ 0 RN/L	ALPHAC 2.410 4.362 GRADIENT	152/ 0 RN/L	ALPHAC 2.043 4.469 GRADIENT	153/ 0 RN/L	ALPHAC 2.079 4.497 GRADIENT	154/ 0 RN/L	ALPHAC 2.049 4.493 GRADIENT	155/ 0 RN/L	ALPHAC 2.044 4.460 GRADIENT	1567 0 RN/L	ALPHAC 2.016 4.375 GRADIENT
ATA	XMRP *	RUN NO.	02 7.261 7.540	RUN NO.	02 9.896 10.215	RUN NO.	02 14.806 14.750	RUN NO.	02 30.131 30.087	PUN NO.	DZ 44.833 45.102	RUN NO.	DZ 50.292 50.425
REFERENCE DATA	SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125												

	5.000 5.000 20.000												
DATA	STAB = ELEVON = DX = MACH =				·								
PARAME TRIC	BETA = .000 RUDDER : .000 10RB = 5.000 DY = .000	5.00	CPSB2 .03045 .03386 .00182	5.00	CPSB2 .01919 .03972	5.00	CPS82 .03890 .04279	5.00	CPSB2 .02270 .04477	5.00	CPSB2 . 04000 . 05894 . 00777	5.00	CPSB2 . 03429 . 05080 . 00677
	BETA RUDDG 10RB DY	-5.00/	CPSB1 00152 .00001	-5.00/	CPSB1 01513 .00310	-5.00/	CPSB1 .00019 .00370 .00141	-5.00/	CPSB1 01318 00269	-5.00/	CPSB1 01167 .00398	-5.00/	CPSB1 00320 .00936
		INTERVAL =	CPCC 01885 01516 .00197	INTERVAL .	CPCC 03042 01344 .00690	INTERVAL =	CPCC 01821 01421 .00160	INTERVAL :	CPCC 02711 01380 . 00519	INTERVAL	CPCC 02184 00550	INTERVAL	CPCC 02060 00553
		GRAD I ENT	XYCP .00238 02723 01576	GRADIENT	XYCP 05094 03987	GRADIENT	XYCP 05213 04348 .00347	GRADIENT	xYCP 09765 07905 .00866	GRADIENT	XYCP 20607 16292	GRADIENT	XYCP 22344 17061 .02166
	IN. XC IN. YC IN ZC	/L = 3.29	x2CP 71073 46504 .13081	RN/L = 3.28	XZCP 89037 51140	RN/L = 3.31	xZCP 97179 53515 -17494	RN/L = 3.30	xzcP 94564 58585 .16746	RN/L = 3.31	XZCP -1.06458 62109	RN/L = 3.30	XZCP -1.05872 62653 .17721
	1339.9000 .0000 190.7500	151/ 0 RN/L	ALPHAC 2.461 4.340 GRADIENT	162/ 0 RN	ALPHAC 2.024 4.482 GRADIENT	163/ 0 RN	ALPHAC 1.989 4.485 GRADIENT	164/0 RN	ALPHAC 2.147 4.296 GRADIENT	165/ 0 RN	ALPHAC 2.006 4.442 GRADIENT	166/0 R	ALPHAC 2.001 4.440 GRADIENT
ATA	XMRP # ZMRP #	RUN NO.	02 2.997 3.241	RUN NO.	DZ 7.114 7.110	RUN NO.	DZ 10.110 9.502	RUN NO.	02 14.885 14.669	PUN NO.	DZ 29.970 29.738	RUN NO.	02 047 . 740 44 . 620
REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.												

(BNH016) (08 OCT 75)	PARAMETRIC DATA	.000 STAB = 5.000 .000 ELEVON = 5.000 6.000 DX = 20.000 .000 MACH = .600		
DATA)	<u>a`</u>	BETA R RUDDER R 10RB R DY	-5.00/ 5.00	CPSB1 CPSB2 00046 .04000 .01526 .04540 .00530 .00216
747/1 ATI 0251 (CARRIER DATA)			GRADIENT INTERVAL *	XYCP CPCC 2281601322 1702300348 .02321 .00390
ARC 14-120(CA23B) 7		MRP = 1339-9000 IN. XC MRP = .0000 IN. YC MRP = 190.7500 IN ZC	RUN NO. 167/ 0 RN/L = 3.30	DZ ALPHAC X2CP 50.218 1.383 -1.09003 50.509 4.47862335 GRADIENT .18701
	REFERENCE DATA	SREF = 5500.0000 SQ.FT. XF LREF = 327.7800 IN. YF BREF = 2348.0400 IN. ZF SCALE = .0125	RUN	

(08 OCT 75

(BNH017)

ARC 14-120(CA23B) 747/1 ATI 02SI (CARRIER DATA)

SREF = LREF = BREF = SCALE =

	5.000 5.000 20.000								
DATA	STAB " ELEVON " DX MACH "								
PARAMETRIC DATA									
PAR	BETA = RUDDER = 10RB = DY	5.00	CPSB2 .08509 .08658	5.00	CPSB2 .07747 .09450	5.00	CPSB2 .08008 .08437 .00183	5.00	CPSB2 .08785 .09877
	RUI PO TO	-5.00/	CPSB1 01116 00852	-5.00/	CPSB1 02074 00268	-5.00/	CPSB1 02258 01151	5.00/	CPSB1 01891 00867 .00426
		GRADIENT INTERVAL :	CPCC 01577 01124	INTERVAL	CPCC 02208 00890	INTERVAL =	CPCC 02605 01551	GRADIENT INTERVAL =	CPCC 02132 00434 00707
		GRADIENT	XYCP 10898 09025	GRADIENT	XYCP 12983 09796	GRADIENT INTERVAL	xYCP 14750 10990	GRADIENT	XYCP -,23644 -,18003 -,02348
	IN. XC IN. YC IN ZC	RN/L = 3.31	xzcP 58230 34657 .11288	RN/L = 3.32	xzcP 68963 40271 .12066	/L = 3.33	xzcP 82644 47262 .15071	/L = 3.32	xzcP -1.00745 57336 .18067
	1339.9000 .0000 190.7500	171/ 0 RN	ALPHAC 2.320 4.409 GRADIENT	172/ 0 RN	ALPHAC 1.989 4.357 GRADIENT	173/ D RN/L	ALPHAC 2.042 4.390 GRADIENT	1747 0 RN/L	ALPHAC 1.994 4.397 GRADIENT
ATA	XMRP YMRP ZMRP	RUN NO.	02 7.409 7.682	RUN NO.	02 10.200 9.876	RGN NO.	02 14.980 14.840	RUN NO.	02 30.168 29.810
REFERENCE DATA	5500.0003 SQ.FT. 327.7800 IN. 2348.0400 IN.								

DATE 22 MAR 76 T	TABULATED	SOURCE DATA	- CA238							= :
		ARC 14-12	-120(CA23B) 74	747/1 AT1 0251	1 (CARRIER DATA)	DATA	9	(BNH017)	1 08 OCT	1 75 1
REFERENCE DATA	•						PARAME TRIC		DATA	
SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125	XMRP = ZMRP =	1 339.9000 1 0000 1 1 90.7500 1	IN. XC			BETA RUDDEF 10RB DY			STAB = ELEVON = DX = HACH =	5.000 25.000 20.000 .600
Æ	RUN NO. 1.	175/ 0 RN/L	L = · 3.32	GRADIENT	INTERVAL =	-5.00/ 5.	. 00			
	44.2.24 45.24	ALPHAC 2.109 4.417 GRADIENT	x2cP 99533 60444 .16938	XYCP 22912 18141	CPCC 01048 00897	CPSB1 00994 00572 .00183	CPSB2 .09738 .09861 .00053			
Æ	RUN NO. 1	176/ 0 RN/L	t = 3.32	GRADIENT	INTERVAL =	-5.00/ 5.	00			
	02 50.344 50.595	ALPHAC 2.118 4.352 GRADIENT	xZCP -1.02516 62271 .18016	XYCP 24060 18506 .02486	CPCC 01703 00713	CPSB1 01054 00172	CPSB2 .09855 .10212			
		ARC 14-18	ARC 14-120(CA23B) 74	747/1 ATI 0251	SI (CARRIER	DATA)	ŧ	BNH018)	90)	OCT 75)
REFERENCE DATA	×						PARAMETRIC		DATA	
SREF = 5500.0000 SO.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125	XMRP YMRP = 2MRP	0000. 0000. 190.7500	IN. XC IN. YC IN ZC			BETA RUDDER 10RB DY	. # 11 # 11	.000 .000 6.000	STAB ** ELEVON ** DX ** MACH **	.ช. .000 .000 .600
Ĉ.	RUN NO. 1	181 0 RN/L	1. 3.32	GRADIENT	INTERVAL =	-5.00/ 5	00.			
	DZ 3.378 3.590	ALPHAC 2.472 4.405 GRADIENT	XZCP 91683 57410	XYCP -1.07678 -1.37601 15473	CPCC 00319 00519 00103	CPSB1 01158 00734 00219	CPSB2 .09318 .08657 00342			
C C	RUN NO. 1	182/ 0 RN/L	1 = 3.31	GRADIENT	INTERVAL .	-5.00/ 5.	00			
	02 7.711 7.20 2	AL PHAC 2.009 4.378 GRADIENT	x2CP -1.07566 59244 -20395	XYCP 84023 92407 03539	CPCC 02383 00976 .00594	CPSB1 02330 00786 .00552	CPSB2 .08017 .08802 .00331			
a c	RUN NO.	1937 0 RN	RN/L = 3.31	GRADIENT	INTERVAL =	-5.00/ 5	.00			
	02 9.911 10.102	ALPHAC 2.005 4.475 GRADIENT	XZCP -1.08423 59844 .19668	XYCP -,73073 -,80676 -,03078	CPCC -,02371 -,00806 .00634	CPSB1 01838 00833	CPSB2 .08223 .08902			

2 MAR 76	TABULATI	TABULATED SOURCE DATA - CA23B	TA - CA238					PAGE	112
		ARC 14-	.RC 14-120(CA238) 7	747/1 ATI 02SI (CARRIER DATA)	SI (CARRIE	R DATA)	(BNH018)	118) (08 OCT	75)
REFERENCE DATA	ATA						PARAMETRIC DATA	C DATA	
5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.	XMRP YMRP ZMRP	. 1339.9000 .0000 . 190.7500	IN. XC IN. YC IN ZC			BETA RUDDE 10RB DY	BETA	STAB ELEVON # DX MACH MACH	5,000 .000 .600
	RUN NO. 184/	0	RN/L = 3.33	GRADIENT	GRADIENT INTERVAL	-5.00/	5.00		
	D2 14.973 14.736	ALPHAC 2.102 4.362 GRADJENT	XZCP -1.05427 62419 .19023	XYCP 69112 55952 .05821	CPCC 02530 00724 00799	CPSB1 02503 00481	CPSB2 .08165 .09257 .00483	ı	
	RUN NO.	185/ 0 RM	RN/L = 3.33	GRADIENT	GRADIENT INTERVAL :	-5.00/	5.00		
	02 29.716 29.761	ALPHAC 2.100 4.335 GRADIENT	XZCP -1.09690 65690	XYCP .10844 2.68843 1.15448	CPCC 02053 00266 .00800	CPSB1 ~.01893 .00031	CPSB2 . 08692 . 09993 . 00582		
	RGN NO.	186/ 0 RN	RN/L = 3.32	GRADIENT	GRADIENT INTERVAL .	-5.00/	5.00		
	DZ 44.733 44.856	ALPHAC 1.972 4.308 GRADIENT	x2CP -1.11721 65689 .19705	XYCP .06150 .23533 .07441	CPCC 01375 00314 .00454	CPSB1 00996 .00172	CPSB2 .09235 .10189 .00408		
	RUN NO.	187/ 0 RN	RN/L = 3.32	GRADIENT	GRADIENT INTERVAL *	-5.00/	5.00		
	DZ 49.952 50.410	ALPHAC 2.021 4.396 GRADIENT	x2CP -1.08815 64227 .18775	XYCP 04628 .06918 .04862	CPCC 00146 00712 00238	CPSB1 .00369 00062	CPSB2 .10001 .09625 00158		

MAR 76	TABULATED	SOURCE DATA	A - CA23B		•				PAGE	13
		ARC 14-18	ARC 14-120(CA23B) 7	747/1 AT1 0251	I CARRIER	DATA	_	(BNH019	9) (08 OCT	T 75)
REFERENCE DATA	ATA						PARAM	PARAMETR1C	DATA	
5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN. .0125	XMRP "YMRP "	1339.9000 .0000 190.7500	IN. XC IN. YC IN ZC			BETA RUDDE 10RB DY		.000 .000 8.000	STAB # ELEVON # DX # MACH #	
	RUN NO.	1917 0 RN/L	/L ≠ 3.32	GRADIENT INTERVAL	INTERVAL =	-5.00/	5.00			
	02 7.491 7.844	ALPHAC 2.+05 4.380 GRADIENT	xZCP 83511 50856 .16533	XYCP -1.25239 -2.70113 73350	CPCC -,00855 -,00541 .00159	CPSB1 00774 00135	CPSB2 .09425 .08817 00308			
	RUN NO.	1921 0 RN/L	1 = 3.32	GRADIENT	INTERVAL .	-5.007	5.00			
	02 9.818 9.759	ALPHAC 2.116 4.310 GRADIENT	x2CP 88973 52565 .16597	XYCP -1.12523 -2.84687 78482	CPCC 02108 00556	CPSB1 01814 00286 .00696	CPSB2 .07901 .08953 .00479			
	RUN NO.	193/ 0 RN	RN/L = 3.32	GRADIENT	INTERVAL =	-5.007	5.00			
	02 14.864 15.018	ALPHAC 1.964 4.414 GRADIENT	XZCP -1.04783 56545 .19689	xYCP 95070 .60897 .63661	CPCC 01471 00723	CPSB1 00271 .00439	CPSB2 .083 57 .09136			
	RUN NO.	1947 0 RN	RN/L = 3.32	GRADIENT	INTERVAL =	-5.00/	5.00			
	02 30.225 30.105	AL PHAC 2.014 4.404 GRADIENT	XZCP -1.07022 61789	XYCP -1.85045 -1.07730	CPCC 01578 .00034 .00675	CPSB1 01712 00209	CPSB2 .08338 .09349 .00423			
	RUN NO.	195/ 0 RN	RN/L = 3.34	GRADIENT	INTERVAL =	-5.00/	5.00			
	02 44.421 45.079	ALPHAC 2.014 4.380 GRADIENT	XZCP -1.05983 64145 .17681	XYCP .44552 .48005 .01459	CPCC 01453 00825 00265	CPSB1 01267 00585	CPSB2 .08635 .09034 .00168			
	RUN NO.	196/ 0 PM	RN/L = 3.34	GRADIENT	INTERVAL =	5.00/	5.00			
	0 2 50.290 50.279	ALPHAC 2.002 4.323 GRADIENT	xZCP -1.05597 64695 -17617	XYCP .15031 .20398 .01881	CPCC 00264 00184	CPSB1 00345 .00302 .00279	CPSB2 .09681 .09797			

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DATE 22 MAR 76

(21 OCT 75)

(BNH020)

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

	. 000 . 000 . 000 . 000										
DATA	STAB ELEVON = DX MACH =										
PARAMETR1C	00000										
PAR	8 N U U	5.00	CPSB2 . 09625 . 06764 . 07771	5.00	CPSB2 .09708 .08537 .07668	5.00	CPSB2 .07857 .08753 .08176	5.00	CPSB2 .09652 .09307 .08947	5.00	CPSB2 .08292 .09597 .08779
	BETA RUDDA 10RB	-5.00/	CPSB1 01766 03038 01978 00057	-5.007	CPSB1 01845 01186 01659	-5.00/	CPS91 03398 01709 01023	-5.007	CPSB1 01100 01327 00370	-5.00/	CPSB1 02366 00757 01051 .00298
		GRADIENT INTERVAL	CPCC 01469 03064 00844	INTERVAL	CPCC 02115 01375 01226 00202	INTERVAL	CPCC 03292 01387 01398	INTERVAL	CPCC 01558 01551 00343	INTERVAL	CPCC 02978 01565 01159
		GRAD I EN	XYCP 18658 15924 11799	GRADIENT	XYCP 20024 15367 12345	GRADIENT	XYCP 19768 15013 12012	GRADIENT	XYCP 19928 15441 11973	GRADIENT	XYCP 23432 18907 15206
	IN. XC	RN/L = 3.32	xZCP -19.53650 -1.27100 76012 4.51668	RN/L = 3.32	xZCP 29.51460 -1.19287 -7.02760	RN/L = 3.32	xzcP 424.47900 -1.16102 73602 -95.60566	RN/L = 3.31	XZCP -8.55418 -1.11882 72178 1.79206	RN/L = 3.30	XZCP -7.33200 -1.05010 69194 1.47485
	1339.9000 .0000 190.7500	0 / O R	ALPHAC .056 2.231 4.258 GRADIENT	0 / O RA	ALPHAC 232 2.422 4.286 GRADIENT	0 / 0 RA	ALPHAC 190 2.393 4.416 GRADIENT	0 / 0	ALPHAC 076 433 4.425 GRADIENT	0 / 0 RN	ALPHAC 160 2.421 4.475 GRADIENT
DATA	XMRP	RUN NO.	DZ 2.999 2.972 3.376	RUN NO.	02 7.356 7.305 7.176	RUN NO.	02 9.998 9.822 9.715	RUN NO.	DZ 14.608 14.941 14.567	PUN NO.	02 29.742 29.812 29.770
REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.										

)E 115	175)		5.000 .000 .000			oct 75)		-1.000 .000 .000						
PAGE	1 OCT		и и и и			Ø 80		H H H H						
	a) (0	DATA	STAB ELEVON DX MACH		ć	_	DATA	STAB ELEVON DX MACH						
	(BNH020)	PARAMETR 1C	0000.			(BNH021)	PARAMETRIC	0000.						M (0.0
		PAR	0 H U H	5.00	CPSB2 .08019 .09697 .09771		PA	BETA RRUDDER RIORB R	5.00	CPS82 .08738 .07465 .05235	5.00	CPSB2 .08256 .07643 .06975	5.00	CPSB2 .07051 .06113
	DATA		BETA RUDDE 10RB DY	-5.00/	CPSB1 - 02020 - 00092 - 00018	R DATA)		BETA RUDDE LORB DY	-5.00/	CPSB1 02347 02997 03808	-5.00/	CPSB1 02465 02759 02543	-5.00/	CPSB1 03310 03864 03016
	SI (CARRIER			INTERVAL	CPCC 03040 00771 00559	0251 CARRIER			INTERVAL	CPCC 02533 02997 04100	INTERVAL	CPCC 03216 02652 02837	I INTERVAL	CPCC 04185 03890
	747/1 AT1 0251			GRADIENT	xYCP 25422 19360 16197	747/1 AT1 02			GRADIENT	XYCP 15904 11077 09026	GRADIENT	xYCP 17240 10796 09103	GRADIENT	XYCP 17348 10304 08345
- CA23B	14-120(CA23B) 74		N.X. ZC XC	3.30	XZCP -5.04471 99836 66643			N. XC N. XC N. XC	L = 3.34	xZCP -1.87063 .75764 .16061 .48493	L = 3.33	XZCP -1.53443 -54906 -13664 -39433	1 = 3.33	XZCP -1.44412 .53437
SOURCE DATA	ARC 14-12		N1 0000. N1 0000. N1 0057.061	0/ 0 RN/L	ALPHAC 105 2.474 · 4.486 GRADIENT	ARC 14-120(CA23B)		1 339.9000 1 .0000 1 1 900.7:001	11/ 0 RN/L	ALPHAC 173 2.255 4.353 GRADIENT	212/ 0 RN/L	ALPHAC 126 2 . 399 4 . 355 GRADIENT	213/ 0 RN/L	AL PHAC 253 2.398 4.413
TABULATED		¥.	XMRP H YMRP H ZMRP H	RUN NO.	02 44.518 44.662 44.473		4TA	XMRP # ZMRP #	RUN NO. 2	3.099	RUN NO.	02 7.673 7.105 7.181	PUN NO.	02 9.888 10.133 9.989
22 MAR 76		REFERENCE DATA	= 5500.0000 SQ.FT. 327.7800 IN. = 2348.0400 IN.				REFERENCE DAT	= 5500.0000 SQ.FT. = 327.7800 IN. = 2348.0400 IN.						
DATE 28			SREF : LREF : BREF : SCALE :					SREF LREF BREF SCALE						

(BNH021) (08 0CT 75)

ATA)
ARRIER D
0251 (C)
/1 AT1
8) 747
14-120(CA23E
ARC

								0CT 75)		5 000 000 000 000		
DATA					·			(08	DATA	STAB = ELEVON = DX MACH =		
PARAMETRIC	00000.							(BNH022	PARAMETRIC			
PAR	#### CC LJ	5.00	CPSB2 .07239 .08285 .07530	5.00	CPSB2 .06935 .07735 .07254	5.00	CPSB2 .06584 .07552 .07569		PAR/	# H # # CC	5.00	CPSB2 .09710 .08811 .08877
	BETA RUDDI TORB DY	-5.00/	CPSB1 02473 01439 01471	-5.00/	CPSB1 02184 01438 00901	-5.00/	CPSB1 01799 00839 00174	R DATA)		BETA RUDDE 10RB DY	-5.00/	CPSB1004140077000407
		T INTERVAL	CPCC 03590 02952 02192	T INTERVAL	CPCC 03722 02828 02538	T INTERVAL	CPCC 03496 02358 02237	O2SI CARRIER			T INTERVAL	CPCC 01035 01230 00678 .00082
		GRADIENT	XYCP 16265 09790 07820	GRADIENT	XYCP 19136 11689 09604	GRADIENT	XYCP 18086 11347 09823	747/1 AT1 0			GRADIENT	XYCP 10786 07809 06478
	IN. XC IN. YC IN. ZC	RN/L = 3.32	xZCP -2.23886 .48330 .11845	FN/L = 3.33	xZCP -2.32324 -40010 10068 56409	/L = 3.33	x2CP -3.17111 -35489 .10226 .78578	14-120(CA23B)		IN. XC IN. YC IN ZC	1. 3.31	xZCP 3.93532 -1.01301 58146 -1.09602
	1339.9000 .0000 190.7500	214/0 RN	ALPHAC 052 2.452 4.403 GRADIENT	215/ 0 FN	AL PHAC -, 137 2, 487 4, 402 GRADIENT	216/ 0 RN/L	AL PHAC 114 2.547 4.315 GRADIENT	ARC 14-1		1339.9000 .0000 190.7500	221/ 0 RN/L	ALPHAC . 180 2.374 4.374 GRADIENT
)ATA	XMRP YMRP	RUN NO. 2	02 14.808 14.795 14.946	RUN NO. R	02 29.743 29.755 29.747	RUN NO. 2	02 44.609 44.499 44.744		ATA	XMRP YMRP = ZMRP =	RUN NO. 2	02 7.175 7.048 7.827
REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN. .0125								REFERENCE DATA	5500,0000 SQ.FT. 327.7800 IN. 2348.0400 IN.		
	SREF # LREF # BREF # SCALE #									SREF = LREF = BREF = SCALE =		

TABULATED SOURCE DATA - CA23B DATE 22 MAR 76

08 OCT PARAMETRIC DATA (BNH022) 747/1 AT1 02S1 (CARRIER DATA) ARC 14-120(CA23B) REFERENCE DATA

PAGE 117

5.000 .000 .000 .000 STAB ELEVON DX MACH .000 .000 .000 .000 .000 CPSB2 .09184 .09602 .10687 CPSB2 .07804 .08669 .08909 CPSB2 .09458 .08625 .09752 CPSB2 .07445 .06640 .09288 CPSB2 .09343 .09225 .08825 5.00 8 5.00 BETA RUDDER 1 10RB 1 5.00 5.00 ľ, CPSB1 -.01215 -.00700 .00026 CPSB1 -.01058 -.01322 -.00381 CPSB1 -.01227 -.01016 -.00048 CPSB1 .00050 .00372 .00487 CPSB1 -.01515 -.01720 -.00516 -5.00/ -5.00/ -5.00/ -5.00/ -5.00/ 10 GRADIENT INTERVAL GRADIENT INTERVAL GRADIENT INTERVAL CPCC -.00933 -.01587 -.00381 GRADIENT INTERVAL GRADIENT INTERVAL CPCC -.02369 -.01043 -.00882 CPCC -.01080 -.00996 -.00001 CPCC -. 02103 -. 02550 -. 00624 .. 00296 CPCC -.00950 -.00734 -.00700 ..0058 XYCP -.23660 -.18702 -.14936 XYCP -.17571 -.14065 -.11961 XYCP -.22545 -.18461 -.15080 -.01687 XYCP -.15102 -.11077 -.06919 xYCP -.11280 -.08417 -.06799 RN/L = 3.30 3.31 RN/L = 3.31 FN/L = 3.31 RN/L = 3.31 xZCP -62.50340 -1.01105 -.68118 14.45494 x2CP -8.17365 -.98567 -.67928 x2CP -7.97086 -1.02047 -.66630 1.65324 XZCP 5.00195 -1.02708 -.64495 -1.28309 XZCP 3.21821 -1.01232 -.61690 1339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC RN/L = ALPHAC -.131 2.479 4.467 GRADIENT ALPHAC -.130 2.540 4.360 GRADIENT ALPHAC -.097 2.520 4.300 GRADIENT ALPHAC -.122 2.456 4.443 GRADIENT ALPHAC -.095 2.462 4.329 GRADIENT 224/ 0 226/ 0 225/ 0 RUN NO. 222/ 0 RUN NO. 223/ 0 44.608 44.758 44.921 50.329 50.199 50.308 02 14.875 15.107 14.650 29.663 30.014 30.212 02 10.008 9.794 10.168 PCN NO. RUN NO. PUN NO. XMRP YMRP ZMRP 5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.

SREF LREF BREF SCALE

SREF = LREF = BREF = SCALE =

OCT 75)		5.000 .000 .600										
00	C DATA	STAB = ELEVON = DX = MACH =										
(BNH023)	PARAMETRIC											
	PAR	BETA ERUDDER ERIORB ERIORB	5.00	CPSB2 .09443 .08360 .07872	5.00	CPSB2 .07923 .07248 .08576	5.00	CPSB2 .09205 .07897 .08532	5.00	CPSB2 .08628 .09291 .08660	5.00	CPSB2 .09535 .08333 .09417
(CARRIER DATA)		99 20 20 70 70 70 70	-5.00/	CPSB1 01702 01120 01179	-5.007	CPSB1 02712 02148 01243 .00314	-5.00/	CPSB1 01455 02019 00959	-5.00/	CPSB1 02163 01105 01000	-5.00/	CPSB1 01290 00234 00212
251 (CARRIE			T INTERVAL	CPCC 01945 01633 01476	T INTERVAL	CPCC 02953 0281 01648	INTERVAL	CPCC 01959 02179 00986	INTERVAL	CPCC - 02243 - 01807 - 01242 - 00220	INTERVAL	CPCC 01074 01825 01043 00007
747/1 AT1 0251			GRADIENT	08901 07922 07230	GRADIENT	XYCP 11877 08470 06153	GRADIENT	XYCP 12775 08455 05790	GRADIENT	XYCP 13452 07906 06118	GRADIENT	XYCP 21972 15928 12691
ARC 14-120(CA23B) 7		IN. XC IN. YC IN ZC	RN/L = 3.31	xZCP 5.50461 -1.09957 67214	FN/L = 3.31	xzcP 4.90354 -1.13960 69168 -1.26930	RN/L = 3.31	xzcP 10.92820 -1.12885 68891	RN/L = 3.31	XZCP 756.97800 -1.06852 -70219 -175.92086	RN/L = 3.31	xzcP -9.32822 -1.08270 69123
ARC 14-		1339.9000 .0000 190.7500	231/ 0 RI	AL PHAC . 028 2.478 4.342 GRADIENT	232/ 0 FI	ALPHAC 157 2.438 4.444 GRADIENT	233/ 0 RN	AL PHAC 079 2 . 449 4 . 4 18 GRADIENT	234/ 0 RN	ALPHAC 060 2.510 4.425 GRADIENT -	235/ 0 RN	ALPHAC 083 2.454 4.441 GRADIENT
	DATA	XMRP # YMRP #	RUN NO.	02 3.160 3.398 3.238	RUN NO.	02 7.044 7.210 7.208	RUN NO.	02 9.588 9.981 9.714	RUN NO.	DZ 14.480 14.703 14.839	RUN NO.	02 29.767 29.743 29.929
	REFERENCE DATA	5500.0000 SQ.FT 327.7800 IN. 2348.0400 IN.										

DATE 22 MAR 76	TABULATED	SOURCE DATA	1 - CA23B						PAGE	611
		ARC 14-120(CA238)	_	747/1 ATI 0251	SI (CARRIER DATA)	DATAI	8	(BNH023)) (08 OCT	15)
REFERENCE DATA	ATA						PARAMETRIC		DATA	
SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125	XMRP # ZMRP #	1339.9000 .0000 190.7500	IN. XC IN. YC IN ZC			BETA RUDDER 10RB DY	, , , , , , , , , , , , , , , , , , ,	6.000	STAB = ELEVON = DX MACH =	5.000 .000 .000 .600
	RUN NO. 2	236/ 0 RN/L	1. 3.31	GRADIENT	INTERVAL =	-5.00/	5.00			
	02 44.538 44.541 44.965	ALPHAC 030 2.408 4.398 GRADIENT	x2CP -5.47442 -1.03454 68017	XYCP 22124 19355 15102	CPCC0146200589	CPSB1 01165 00472 .00058	CPSB2 .09273 .10132 .10096			
	RUN NO. 2	237/ 0 FN	FN/L = 3.31	GRADIENT	INTERVAL =	-5.00/	5.00			
	02 49.951 49.970 50.050	ALPHAC 140 2.539 4.426 GRADIENT	XZCP -7.44901 -1.00752 68152 1.54403	XYCP 23807 18973 14695 .01982	CPCC 02499 00796 01690	CPSB1 02472 .00551 00173	CPSB2 .0827 .09549 .07836			
		ARC 14-1	-120(CA23B) 7	747/1 AT1 02	O2S1 (CARRIER	DATA	•	PSOHNB)) (21 OCT	75)
REFERENCE DATA	DATA						PARAM	PARAME TRIC	DATA	
SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125	XMRP # ZMRP #	1339.9000 .0000 190.7500	IN. XC IN. YC IN ZC			BETA RUDDEF 10RB DY	# H H H	00000	STAB # ELEYON # DX # MACH #	-1.000 .000 .000 .600
	RUN NO. 2	241/0 PA	RN/L = 3.30	GRADIENT	INTERVAL =	-5.00/	5.00			
	02 2.790 3.147 3.235	ALPHAC .104 2.378 4.382 GRADIENT	xZCP -1.78359 1.45082 .39573	XYCP 15532 11700 08353	CPCC 03304 02431 02060	CPSB1 02520 01487 01225	CPSB2 .07880 .07709 .07176			
	RUN NO.	242/ 0 RM	RN/L = 3.30	GRADIENT	INTERVAL	-5.00/	5.00			
	02 7.214 7.169 7.223	ALPHAC -107 -107 2.445 4.433 GRADIENT	x2CP -1.76884 1.10658 .31729	XYCP -,17317 -,11292 -,08027	CPCC 02419 02199 02412	CPSB1 02069 01444 01603	CPSB2 .08474 .07915 .07398			

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TABULATED SOURCE DATA - CA238

(CARRIER DATA)
0251
ATI
747/1
14-120(CA23B)
ARC

(BNH024) (21 OCT 75)	RIC DATA	STAB = -1.0cc ELEVON = .0cc DX = .ccc MACH = .6cc		ć								
NB)	PARAMETRIC	RUDDER	5.00	CPSB2 .07315 .08048 .08072	5.00	CPSB2 .08815 .08089 .07738	5.00	CPSB2 .07439 .08643 .08342 .00209	5.00	CPSB2 .05538 .07277 .08485	5.00	CPSB2 .08465 .08500 .09135
2 DATA)		88 30 0	-5.00/	CPSB1 03282 01809 01199	-5.007	CPSB1 01751 1.08076 01771	-5.00/	CPSB1 02459 01484 01222	-5.007	CPSB1 -, 02769 -, 02382 -, 00951 -, 00388	-5.00/	CPSB1 01550 01223 00621
SI (CARRIER			INTERVAL	CPCC 03522 02160 02169	INTERVAL .	CPCC 02371 02295 02255	INTERVAL .	CPCC 03045 02158 01734 .00291	INTERVAL .	CPCC 03385 03345 01759	INTERVAL =	CPCC 02199 02088 01725
747/1 ATI 0251			GRADIENT	XYCP 15772 09887 07629	GRADIENT	XYCP 17957 08593 07395	GRADIENT	XYCP 19255 11896 10638	GRADIENT	xYCP 20751 13211 11737	GRADIENT	XYCP 20432 13383 11363
14-120(CA23B) 7		IN. XC IN. YC IN ZC	1.30	XZCP -1.99741 .94164 .29796 .55726	1 = 3.30	xZCP -1.81369 .75956 .25688	1.29	XZCP -2.63966 .60676 .16738	1. 3.28	XZCP -2.67912 .51563 .13994 .64035	1. 3.28	XZCP -3.01015 -44612 -13942 -74147
ARC 14-13		1339.9000 .0000 190.7500	243/ 0 RN/L	ALPHAC 036 2.466 4.354 GRADIENT	244/ 0 FN/L	ALPHAC 163 2.499 4.287 GRADIENT	245/ 0 RN/L	ALPHAC 049 2.432 4.487 GRADIENT	246/ 0 RN/L	ALPHAC 131 2.390 4.445 GRADIENT	2477 0 RN/L	ALPHAC 101 2.534 4.394 GRADIENT
	ATA	XMRP YMRP ZMRP	RUN NO.	DZ 9.900 9.833 9.797	RUN NO.	20 14.827 14.725 14.41	RUN NO.	DZ 29.598 29.897 29.731	RUN NO.	D2 44.528 44.796 44.981	RUN NO.	02 49.996 50.084 50.059
	REFERENCE DATA	SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125										

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BET RUD 108	RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00 AC X2CP XYCP CPCC CPSB1 CPSB2 27 -1.88371 24066 02724 02591 .07939 72 2.24724 13669 02486 02274 .07260 78 .52776 10937 01280 00660 .08335 NT .56255 .02947 .00315 .00422 .00079	AC XZCP XYCP CPCC CPSB1 CPSB2 11.95889209990233701474 .09074 14.3 1.26649121100131700646 .09072 174 .44678070080244601594 .07887 1 .59373 .03208 .0000200055	RN/L = 3.31 GRADIENT xZCP xYCP -1 9521 - 201395
CPCC (CPCC0272402724024860128000315		CPCC02337013170244600002	CPCC ~ 03064 - 02501 - 02601 - 00667
RN/L = 3.31		0 RN/L = 3.30 ALPHAC XZCP X013 -1.95889 2.543 1.26649 4.374 .44678 ADIENT .59373 .	0 RN/L = 3.31 ALPHAC XZCP X162 -1.95231 2.450 .89424 4.437 .27080
RUN NO. 0/	DZ 9.339 10.040 10.061 6R	RUN NO. 07 DZ 14.643 15.082 14.801 GR	RUN NO. 07 DZ 29.827 30.228 30.232

CPSB2 .07997 .08639 .09249

CPSB1 -.01554 -.00617 -.00082

CPCC -.02218 -.01074 -.01346 ..00201

XYCP -. 22274 -.14246 -.11712

x2CP -2.24688 .68702 .20692

ALPHAC -. 132 2. 364 4. 412 GRADIENT

DZ 44.600 45.018 44.806

GRADIENT INTERVAL = -5.00/ 5.00

0/0 RN/L = 3.32

RUN NO.

1 75)		000. 000. 009.			(57)		5.000 .000 .000 .600							
25) (21 OCT	C DATA	STAB = ELEVON = DX MACH =			(79 OCT	DATA	STAB = ELEVON = DX = MACH =							
(BNH025)	PARAMETR1(.000 .000 .000 .000			(BNH027)	PARAMETR I C	. 000 . 000 . 000 . 000							
	PAR	11 11 H II	5.00	CPSB2 .07466 .09412 .09115		PAR	# # # # 64	5.00	CPSB2 .12094 .10265 .11388	5.00	CPSB2 .11100 .11735 .11599	5.00	CPSB2 .11475 .12011 .11491	
R DATA)		BETA RUDDEF IORB DY	-5.00/	CPSB1 -,02564 -,00729 -,00269	P DATA)		BETA RUDDI TORB DY	-5.00/	CPSB1 00467 00557 .00792	-5.00/	CPSB1 00916 .01130 .01010	-5.007	CPSB1 -,007 62 .00929 .01342	
OZSI (CARRIER			INTERVAL	CPCC 03150 01778 01509	O3SI (CARRIER			INTERVAL =	CPCC .00550 00233 .01148	INTERVAL =	CPCC . 00031 . 00993 . 01147	INTERVAL =	CPCC . 00294 . 01366 . 01589	
747/1 AT1 06			GRADIENT	XYCP 24351 13423 12098	747/1 AT! 03			GRADIENT	XYCP 15101 10833 07727	GRADIENT	XYCP 15464 07749 01703	GRADIENT	XYCP 17269 15223 10669	
14-120(CA23B)		IN. XC IN. YC IN ZC	1.33	XZCP -2.10859 .59874 .19829	-120(CA23B) 7		IN. XC IN. YC IN ZC	1.28 1.28	x2CP 2.81625 93545 55880	1. 3.28	x2CP 2.36552 93834 58432	1 = 3.27	xzcP 4.83274 97420 61514 -1.22854	
ARC 14-1		1339.9000 .0000 190.7500	0/0 RN/L	ALPHAC 233 2.449 4.339 GRADIENT	ARC 14-18		1339.9000 .0000 190.7500	261/ 0 RN/L	ALPHAC . 046 2.283 4.288 GRADIENT	262/ 0 RN/L	ALPHAC 171 2.437 4.384 GRADIENT	263/ 0 RN/L	ALPHAC 143 2.462 4.479 GRADIENT	
	ATA	XMRP #	RUN NO.	DZ 49,823 50,763 50.761		ATA	XMRP = ZMRP = =	RUN NO. 2	02 7.310 7.309 7.865	RUN NO. 26	DZ 9.835 9.901 9.652	RUN NO. 26	20 056:41 938 11:41 20 20	
	REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.				REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN. .0125							
		SREF = LREF = BREF = SCALE =					SREF ** LREF ** BREF ** SCALE **							

22 MAR 76	TABULATED	SOURCE	- CA23B	747/1 ATI 03SI (CARRIER	SI (CARRIER	DATA)		(BNH027)	PAGE	123
REFERENCE DATA	ATA						PARAMETR	ည	DATA	
5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.	XMRP = ZMRP =	1339.9000 .0000 190.7500	IN. XC IN. YC IN ZC			BETA RUDDE 10RB DY	4 H H H 20		STAB = ELEVON = DX = MACH =	5.000 .000 .000 .600
	RUN NO. R	264 / 0 RN	RN/L = 3.27	GRADIENT	INTERVAL =	-5.00/ 5	00.00			
	02 29.711 29.841 30.092	ALPHAC 161 - 2.529 4.385 GRADIENT	xZCP .346.52800 99826 66176 79.83991	XYCP 21795 17136 12362 .02051	CPCC 00255 .00990 .01479	CPSB100201 .01210 .01507 .00386	CPSB2 .11073 .11742 .11653		c'	
	RUN NO.	265/ 0 FN	FN/L = 3.27	GRADIENT	INTERVAL =	-5.00/	5.00			
	02 44.673 44.791 44.852	ALPHAC 113 2.534 4.379 GRADIENT	XZCP -6.56277 96538 66088 1.36951	XYCP 24445 20722 15996	CPCC .00703 .01021 .01128 .00096	CPSB1 .01335 .01624 .01100	CPSB2 .11614 .12292 .11793			
	RUN NO.	266/ 0 RN	RN/L = 3.28	GRADIENT	INTERVAL =	-5.00/	5.00			
	02 50.205 50.115 50.310	ALPHAC 137 2.437 4.427 GRADIENT	XZCP -14.25580 -1.00704 65110 3.08444	xYCP 26803 20977 16288	CPCC 00489 .00974 .01254 .00391	CPSB1 00544 .01166 .02024 .00568	CPSB2 .10803 .12035 .11980			
		ARC 14-1	14-120(CA238)	747/1 AT1 03	03SI (CARRIER	DATA		(BNH028)	(08 OCT	. 57
REFERENCE DATA	ATA						PARA	PARAMETRIC	DATA	
5500.0000 SO.FT. 327.7800 IN. 2348.0400 IN.	XMRP YMRP ZMRP *	1339.9000 .0000 190.7500	IN. XC IN. YC IN ZC			BETA RUDDER 10R9 DY	(C)	0000	STAB E ELEVON E DX E MACH E	5.000 .000 .600
	RUN NO.	281/ 0 RP	RN/L = 3.28	GRADIENT	INTERVAL =	-5.00/	5.00			
	02 3.140 3.154	ALPHAC 2.460 4.481 GRADITAT	x2CP 99617 60471	XYCP 14768 11417 .01658	CPCC 00121 .00052	CPSB1 00997 00385	CPSB2 . 10383 . 09972 00204			

(BNH028) (08 OCT 75)

(CARRIER DATA)
11 0351
A 1/17
14-120(CA238)
ARC 1

	5.000 .000 10.000 .600												
DÀTA	STAB = ELEVON = DX = MACH =												
PARAMETR1C												,	
PAR/	# # # # OC 5.1	5.00	CPSB2 .09194 .10767 .00658	5.00	CPSB2 .09128 .10230	5.00	CPSB2 . 09874 . 10751 . 00358	5.00	CPSB2 .10059 .11875 .00760	5.00	CPSB2 .10340 .11074 .00302	5.00	CPSB2 .10382 .11355
	BETA RUDOI 10RB DY	-5.00/	CPSB1 01244 .00122	-5.00/	CPSB1 01695 00564 .00467	-5.00/	CPSB1 01562 .00269 .00746	-5.007	CPSB1 00658 .01462 .00908	-5.007	CPSB1 .00140 .00987 .00349	-5.00/	CPSB1 .00160 .01420
		INTERVAL =	CPCC 00866 .00777 .00688	INTERVAL =	CPCC 00910 00016	INTERVAL =	CPCC 01184 .00625	INTERVAL =	CPCC 00712 .01052	INTERVAL .	CPCC 00726 .00603 .00547	INTERVAL =	CPCC 00843 .01036
		GRADIENT	xYCP 13505 09219 .01795	GRADIENT	XYCP 11862 07425 .01834	GRADIENT	XYCP 09561 05374 .01705	GRADIENT	xYCP 18153 13171	GRADIENT	xYCP 21252 16250 .02060	GRADIENT	xYCP 21048 15507 .02236
	IN. XC IN. YC IN ZC	L ≈ 3.28	XZCP -1.17575 63895 .22481	13,28	XZCP -1.15202 64484 .20964	3.28	x2CP -1.17026 66051 .20764	3.29	x2CP -1.11512 65562 .19248	3.29	XZCP -1.12746 66202 .19168	3.29	x2CP -1.11633 64534 .19004
	. 1339,9000 . 0000 . 190,7500	282/ 0 RN/L	ALPHAC 2.022 4.410 GRADIENT	283/ 0 RN/L	ALPHAC 2.068 4.488 GRADIENT	284/ 0 RN/L	ALPHAC 2.026 4.481 GRADIENT	285/ 0 RN/L	ALPHAC 2.180 4.515 GRADIENT	286/ 0 RN/L	ALPHAC 2.093 4.521 GRADIENT	287/ 0 RN/L	ALPHAC 2.061 4.539 GRADIENT
ATA	XMRP **	RUN NO.	02 7.424 7.204	RUN NO.	02 9.851 9.970	RUN NO.	02 14.671 14.337	RUN NO.	02 29.878 29.674	RUN NO.	DZ 44.780 45.100	RUN NO.	DZ 50.200 50.258
REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.												
	SREF ** LREF ** BREF ** SCALE **												

TABULATED SOURCE DATA
76
MAR
25

PAGE 125	(08 OCT 75)	000.01 000.01
	(BNH029)	STAB ELEVON DX MACH
	HNB	PARAMETRIC DATA .000 STAB .000 ELEVO 8.000 DX
		BETA = RUDDER = 10RB = DY
	ARC 14-120(CA238) 747/1 ATI 0351 (CARRIER DATA)	
'ABULATED SOURCE DATA - CA23B	ARC 14-120(CA23B)	XMRP = 1339.9000 IN. XC YMRP = .0000 IN. YC ZMRP = 190.7500 IN ZC
DATE 22 MAR 76		REFERENCE DATA SREF = 5500.0000 SO.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125

5.00	CPSB2 .11391 .10945 00226	5.00	CPSB2 .10720 .11276	5.00	CPSB2 .10437 .11265	5.00	CPSB2 .10526 .11908 .00590	5.00	CPSB2 .10707 .12086 .00584	5.00	CPSB2 . 10831 . 12081 . 00495
-5.00/	CPSB1 .00307 .00502	-5.00/	CPSB1 00167 .01135	-5.00/	CPSB1 00670 .00955	-5.00/	CPSB1 .00168 .01572 .00590	-5.00/	CPSB1 .00478 .01659	-5.00/	CPSB1 .00659 .01871
INTERVAL =	CPCC .00471 .00666	INTERVAL .	CPCC .00106 .01053 .00390	INTERVAL =	CPCC 00562 .00900 .00611	INTERVAL =	CPCC 00183 .01000	INTERVAL =	CPCC 00088 .01577 .00706	INTERVAL .	CPCC 00261 .01296
GRADIENT INTERVAL	xYCP 13090 09961	GRADIENT	xYCP 13625 08615	GRADIENT	XYCP 10094 06392	GRADIENT	XYCP 15430 11757 .01543	GRADIENT	XYCP 20739 16162	GRADIENT	XYCP 21725 15564 .02445
291/ 0 RN/L = 3.29	ALPHAC XZCP 2.46583163 4.44250502 GRADIENT .16515	292/ 0 RN/L = 3.28	AL PHAC XZCP 2.05799557 4.48653530 GRADIENT .18945	293/ 0 RN/L = 3.28	AL PHAC XZCP 2.020 -1.06976 4.41258850 GRAD ENT	294/ 0 RN/L = 3.29	ALPIAC XZCP 2.128 -1.07242 4.51063370 GRADIENT .18422	295/ 0 RN/L = 3.28	AL PHAC XZCP 2.087 -1.09723 4.44664516 GRADIENT .19162	296/ 0 RN/L = 3.28	ALPHAC XZCP 2.027 -1.11875 4.54764030 GRADIENT .18986
RUN NO.	02 7.274 7.616	RUN NO.	02 10.037 10.105	RUN NO.	DZ 15.073 14.864	RUN NO.	02 30.231 29.953	RUN NO.	D2 44.559 45.001	RUN NO.	DZ 50.108 50.709

R 76	TABULATED SOURC	D SOURCE DATA	TA - CA23B					V d.	PAGE 126	
		ARC 14-	14-120(CA23B) 7	747/1 ATI 03SI	SI (CARRIER DATA)	DATA)	9	(BNH030) (08 OCT	ICT 75)	
REFERENCE DATA	ITA						PARAMETRIC	TRIC DATA		
500.0000 SO.FT. 327.7800 IN. 348.0400 IN.	XMRP YMRP = ZMRP	1339.9000 .0000 190.7500	IN. XC IN. YC IN ZC			BETA RUDDI 10RB 0Y	BETA	00 STAB = 00 ELEVON = 00 DX = 00 MACH = 00 MAC	5.000 .000 20.000 .500	
	RUN NO.	301/ 0 RN	RN/L = 3.28	GRADIENT	INTERVAL =	-5.00/	5.00			
	02 7.146 7.541	ALPI-AC 2.474 4.355 GRADIENT	XZCP 78822 48451 16155	XYCP 14444 11168	CPCC0077300014	CPSB1 00828 .00700	CPSB2 .09771 .10630 .00457			
	RUN NO.	302/ 0 RN	RN/L = 3.28	GRADIENT	INTERVAL =	-5.00/	5.00			
	02 10.020 10.077	ALPHAC 2.021 4.495 GRADIENT	XZCP 93859 51312	xYCP 13993 09978 .01623	CPCC 01060 .00269	CPSB1 00655 .00790	CPS92 . 09346 . 10735 . 00561	:		
	RUN NO.	303/ 0 RN	RN/L = 3.28	GRADIENT	INTERVAL .	-5.00/	5.00			
	DZ 14.887 14.608	ALPHAC 2.172 4.441 GRADIENT	xZCP 97686 56737 .18052	XYCP 12097 08291	CPCC 01607 .00635	CPSB1 -,00605 .01511	CPSB2 .09578 .11175			
	RUN NO.	304/ 0 RN	RN/L = 3.28	GRADIENT	INTERVAL #	-5.00/	5.00			
	02 30.123 29.781	ALPHAC 1.934 4.549 GRADIENT	XZCP -1.14764 61373 .20416	XYCP 17881 12295 .02136	CPCC 00644 .00438	CPSB1 .00221 .01455	CPSB2 .10464 .11080 .00236			
	RUN NO.	305/ 0 RN	RN/L = 3.29	GRADIENT	INTERVAL =	-5.00/	5.00			
	02 44,889 44,724	ALPHAC 2.080 4.413 GRADIENT	xZCP -1.06362 65646 .17454	XYCP -:21347 16513	CPCC 01036 00401	CPSB1 00254 .00436	CPSB2 . 10527 . 10431			
	RUN NO.	306/ 0 RN	RN/L = 3.30	GRADIENT	INTERVAL =	-5.00/	5.00			
	02 50,425 50,408	ALPHAC 2.C67 4.416 GRADIENT	XZCP -1.10385 64212	XYCP 22676 16605 .02585	CPCC 00560 .01181	CPSB1 .00304 .01809	CPSB2 .10730 .12507 .00756			

PAGE 127	(BNH031) (08 OCT 75)	RIC DATA	STAB = 5.000 ELEVON = .000 DX = 20.000 MACH = .600									
	NO.	PARAMETRIC	BETA = .000 RUDDER = .000 10RB = 6.000 DY = .000	5.00	CPSB2 .08518 .09964	5.00	CPSB2 .10381 .10297 00033	5.00	CPSB2 .09113 .10324 .00472	5.00	CPSB2 .11423 .11318 00046	5.00
	DATA		BETA RUDDE 10RB 0Y	-5.00/	CPSB1 02262 00198	-5.00/	CPSB1 00322 .00076 .00156	-5.00/	CPSB1 01373 .00584 .00763	-5.00/	CPSB1 .01105 .01014	-5.007
	1 (CARRIER I			INTERVAL =	CPCC 01910 00444 .00758	INTERVAL =	CPCC 00350 .00022 .00145	GRADIENT INTERVAL =	CPCC 01508 .00146 .00645	INTERVAL =	CPCC .00558 .00303 -,00112	GRADIENT INTERVAL =
	747/1 ATI 03SI (CARRIER DATA)			GRADIENT INTERVAL	XYCP 14435 09866 -02362	GRADIENT INTERVAL	XYCP 14199 08005 .02419	GRADIENT	XYCP 11827 06896 01924	GRADIENT	XYCP 19239 13820 .02376	GRADIENT
SOURCE DATA - CA23B	ARC 14-120(CA238) 74		000 IN. XC 000 IN. YC 500 IN ZC	RN/L = 3.29	AC XZCP 40 -1.03707 7462873 NT .21109	RN/L = 3.29	AC XZCP 889 -1.17571 94961824 INT .21773	RN/L = 3.30	4AC XZCP 981 -1,22118 524 -,63939 511 -22700	RN/L = 3.29	AAC XZCP 982 -1.19739 26269146 ENT .22189	RN/L = 3.29
	ARC		1339.9000 .0000 190.7500	311/0	AL PHAC 2.440 4.374 GRAD IENT	312/ 0	AL PHAC 1.989 4.549 GRADIENT	313/ 0	ALPHAC 1.961 4.524 GRADIENT	314/ 0	ALPHAC 1.982 4.262 GRADIENT	315/ 0
TABULATED		IŢA	XMRP = ZMRP =	RUN NO.	02 7.139 7.034	FCN NO.	02 9.707 9.890	RUN NO.	02 14.857 14.654	RUN NO.	0 2 29.665 29.802	RUN NO.
DATE 22 MAR 76		REFERENCE DATA	SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125									

CPSB1 -.00116 .01680 .00748

CPCC -.00899 .01297

XYCP -.21325 -.16413

AL PHAC 1.970 4.370 GRADIENT

DZ 44.676 44.732

CPSB1 .00646 .01734 .00459

CPCC .00181 .01105 .00390

XYCP -.21083 -.15084 .02111

X2CP -1.15364 -.67208

AL PHAC 2.003 4.371 GRADIENT

02 50.207 50.098

-5.007

GRADIENT INTERVAL *

RUN NO. 316/ 0 RN/L # 3.29

(08 OCT 75)

(BNH032)

ARC 14-120(CA23B) 747/1 ATI 03SI (CARRIER DATA)

0 H H H											
STAB ELEVON DX MACH		(
.000											
	5.00	CPSB2 .10601 1.38689	5.00	CPSB2 .11220 .10255 00405	5.00	CPSB2 . 11576 . 09308 00950	5.00	CPSB2 .11296 .10964	5.00	CPSB2 .10230 .10990	5.00
## F - 7	-5.00/	CPSB1 00145 00046	-5.00/	CPSB1 .00013 00333	-5.00/	CPSB1 00241 00868 00263	-5.00/	CPSB1 .00396 .01087	-5.00/	CPSB1 00194 .01025	-5.00/
	INTERVAL =	CPCC .00513 .01128	INTERVAL =	CPCC . 00915 . 00679 00099	INTERVAL	CPCC .00523 00167	INTERVAL =	CPCC .00861 .00978 .00053	INTERVAL =	CPCC 00707 .00697 .00604	INTERVAL =
	GRADIENT	XYCP -1.23298 -1.69440 23779	GRADIENT	XYCP 83811 -1.04181 08556	GRADIENT	XYCP 66350 82049	GRADIENT	XYCP 43953 .01407 .20621	GRADIENT	XYCP 00277 .52606 .22741	GRADIENT INTERVAL
N. XC N. XC	L = 3.30	XZCP -1.14867 68697 .23794	L = 3.30	XZCP -1.26345 68840 -24154	L = 3.30	XZCP -1.29376 69781 -24967	L = 3.30	XZCP -1.23106 71261 .23568	L = 3.30	x2CP -1.19367 69939	L = 3.30
1339.9000 .0000 190.7500	0	ALPHAC 2.384 4.324 GRADIENT	0	ALPHAC 1.999 4.379 GRADIENT	0	ALPHAC 1.980 4.367 GRADIENT	0	ALPHAC 2.049 4.248 GRADIENT	0	ALPHAC 1.976 4.301 GRADIENT	326/ 0 RN/L
XMRP YMRP ZMRP	RUN NO.	02 3.217 3.310	RUN NO.	02 7.247 7.563	RUN NO. 3	02 10.032 9.896	RUN NO. 3	02 15.217 15.047	RUN NO. 3	02 29.998 29.890	RUN NO. 3
EF = 5500.0000 SQ.FT. EF = 327.7800 IN. EF = 2348.0400 IN. ALE = .0125											
	5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC 327.7800 IN. YMRP = .0000 IN. YC 2349.0400 IN. ZMRP = 190.7500 IN ZC .0125 .0125	# 5500.0000 SQ.FT. XMRP # 1339.9000 IN. XC # 327.7800 IN. YMRP # .0000 IN. YC # 2348.0400 IN. ZMRP # 190.7500 IN ZC # .0125 RUN NO. 321/ 0 RN/L = 3.30 GRADIENT INTERVAL # -5.00/ 5.00	# 5500.0000 SQ.FT. XMRP # 1339.9000 IN. XC # 327.7800 IN. YMRP # .0000 IN. YC # 2348.0400 IN. ZMRP # 190.7500 IN ZC # 2348.0400 IN. ZMRP # 190.7500 IN ZC # 2348.0400 IN. ZMRP # 190.7500 IN ZC # 190.7500 IN ZC # 190.7500 IN ZC # 10.000 # 10.000 # 221.0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00 # 10.000 #	# 5500.0000 SQ.FT. XMRP # 1339.9000 IN. XC # 227.7800 IN. YMRP #0000 IN. YC # 227.7800 IN. YMRP #0000 IN. YC # 2348.0400 IN. ZMRP # 190.7500 IN ZC RUDDER #0000 IORB # 6.000 DY # 190.7500 IN ZC RUN NO. 321/ 0 RN/L # 3.30 GRADIENT INTERVAL # -5.00/ 5.00 S.310 # 324 -1.69440 12849 GRADIENT 23794 -1.69440 10051 66010 RUN NO. 322/ 0 RN/L # 3.30 GRADIENT INTERVAL # -5.00/ 5.00	# 5500.0000 SQ.FT. XMRP # 1339.9000 1N. XC # 237.7800 1N. YMRP # 190.7500 1N. YC # 2348.0400 1N. ZMRP # 190.7500 1N ZC # 2348.0400 1N. ZMRP # 190.7500 1N ZC # 2348.0400 1N. ZMRP # 190.7500 1N ZC # 23.84	# 5500 0000 SQ.FT. XMRP = 1339.9000 IN. XC	## 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC	# 5500.0000 \$0.FT. XMRP = 1339.9000 IN. XC	# 5500.000 SO.FT.	# 550.000 S0.FT	# 5500.000 IN. YMPR

CPSB2 .11426 .11238

CPSB1 .00722 .00995

CPCC .00476 .00804 .00138

XYCP -.07546 .04575 .05121

x2CP -1.16598 -.68504 -20321

ALPHAC 1.958 4.325 GRADIENT

02 44.648 44.989

REFERENCE DATA = 5500.0000 SQ.FT. = 327.7800 IN. = 2348.0400 IN. RU	XMRP = ZMRP = ZMRP = DZ = D	ARC 14-120 1339-9000 IN 190.7500 IN 190.7500 IN 190.7500 IN ALPHAC 1.369 4.664 GRADIENT	- CAE38 O(CAE38) N. XC N. YC N. ZC XZCP -1.13946 -69398 19411	GRADIENT INTERVAL XYCP 1020000772 01323 .00024 .03869 .00347	<u> </u>	BETA RUDDA 10AB DY DY 11 172 71	(BNH032) PARAMETRIC D ER = .000 S E.000 D = 10.000 M .00 CPSB2 .10182 .10182 .10423	2) (08 OCT 7 DATA	5)
# 5500.0000 SQ.FT. # 2348.0400 IN. - 2348.0400 IN. - 2348.0400 IN. RU RU RU	XMRP = ZMRP = ZMRP = ZMRP = N NO. DZ 7.500 7.513 9.859 9.859 0.857 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	1339.9000 IN. 190.7500 IN. 3317 0 RN/L ALPHAC 2327 0 RN/L ALPHAC 1.907 4.322 GRADIENT 3337 0 RN/L ALPHAC 1.933 4.327 GRADIENT 3337 0 RN/L ALPHAC 1.933 4.327 GRADIENT 3347 0 RN/L ALPHAC 1.933 4.327 GRADIENT	D IN. XC D IN. YC D IN ZC RN/L = 3.30 XZCP -1.02465 -2.63712 -2.63712 -1.32293 -6.3921 -7.2729 -7.2550 -7.25	CRADIENT XYCP -1.68195 .77010 1.32878 CRADIENT XYCP -1.33179 .03190 .56465 GRADIENT XYCP -183282 -152952 .12669 GRADIENT XYCP -183282 -152952 -152952 -156933	CPCC01024	BETA RUDGER 10RB DY -5.00/ 5.0 CPSB1 -5.00/ 5.0 CPSB1 -5.00/ 5.0 CPSB1 -00015 -5.00/ 5.0 CPSB1 -5.00/ 5.0 CPSB1 -5.00/ 5.0	PARAMETRIC ER = .000 CPSB2 .1092 .11092 .11092 .10682 .1069400466 .00 CPSB2 .1049400466 .00 CPSB2 .1049400466 .00 CPSB2 .1049400466 .11410 .11389	STAB " STAB WACH " STAB WACH " STAB WACH " STAB WACH WACH WACH WACH WACH WACH WACH WACH	000000000000000000000000000000000000000

DRIGINAL PAGE IS DE POOR QUALITY (BNH033) (08 OCT 75)

TABULATED SOURCE DATA - CA238

DATA
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120 (CA23B
1RC 14-
ARC

	5.000 .000 .000 .600					08 OCT 75)		5.000 .000 .600				
C DATA	STAB = ELEVON = DX = MACH =					J	C DATA	STAB = ELEVON = DX = MACH =				
PARAMETRIC DATA	.000 .000 8.000					(BNHO34)	PARAMETRIC	. 000 . 000 6. 000 . 000				
PAR	7A 2006 R = # 38 = #	5.00	CPSB2 .10303 .11475	5.00	CPSB2 .12130 .11725 00173		PAR	TA DDER = RB = =	5.00	CPSB2 .11953 .10428 .08881	5.00	CPSB2 . 12153 . 11170 . 09629
	98. 10.00	-5.00/	CPSB1 00190 .01287	-5.00/	CPSB1 .01460 .01559	P DATA)		98 0.0 P	-5.00/	CPSB1 00541 00527 00987	-5.00/	CPSB1 00472 .00036 00234
		GRADIENT INTERVAL	CPCC 00839 . 01013	INTERVAL	CPCC . 00887 . 01012 . 00053	SI (CARRIE			INTERVAL	CPCC . 00664 . 00293 00394	INTERVAL	CPCC . 01082 . 01892 . 00804
		GRADIENT	XYCP . 08823 . 23419 . 06066	GRADIENT	XYCP 04751 .07171	747/1 ATI 03SI (CARRIER DATA)			GRADIENT	XYCP 24921 20461 17471	GRAD I ENT	XYCP 28033 20975 17420 .02386
	IN. XC IN. YC IN ZC	/L = 3.30	xZCP -1.18809 68263 -21005	1 ≈ 3.30	XZCP -1.18214 68277	ARC 14-120(CA23B) 7		IN. XC IN. YC IN ZC	ا3.31	xZCP 2.51092 -1.16419 67431	1 3.31	XZCP 2.57828 -1.14453 67451 75323
	1339,9000 .0000 190.7500	335/ 0 RN/L	ALPHAC 1.871 4.278 GRADIENT	336/ 0 RN/L	ALPHAC 1.913 4.260 GRADIENT	ARC 14-18		1339.9000 .0000 190.7500	341/ 0 RN/L	ALPHAC 031 2.266 4.259 GRADIENT	342/ 0 RN/L	ALPHAC -, 127 2, 324 4, 353 GRAD (ENT
DATA	XMRP = ZMRP = =	RUN NO.	DZ 44.819 45.000	RUN NO.	02 50.002 50.443		ATA	XMRP #	RUN NO.	DZ 1.515 1.466 1.364	RUN NO.	02 3.218 2.877 3.390
REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN. .0125						REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.				
	SREF "LREF" BREF "SCALE "		·					SREF # LREF # BREF # SCALE #				

CA23B
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TABULATED SOURCE DATA
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E 131	T 75)		5.000 .000 .000 .600						
PAGE	(4) (08 OCT 75	: DATA	STAB = ELEVON = DX = MACH =						
	(BNH034)	PARAMETRIC DATA	6.000				10.40 40		JO (D) (U)
		A	BETA = RUDDER = 10RB = DY	5.00	CPSB2 .10858 .11081 .10712	5.00	CPSB2 .10815 .10866 .10591	5.00	CPSB2 .10771 .11275 .10659 00012
	DATA		BET RUD 108	-5.00/	CPSB1 01539 00376 .00294	.5.00/	CPSB1 01032 00502 .00079	-5.00/	CPSB1 00685 00216 .00064
	SI (CARRIER			GRADIENT INTERVAL =	CPCC 00809 .00827 .00757	GRADIENT INTERVAL	CPCC 00412 .00837 .00707	GRADIENT INTERVAL	CPCC 00658 .00523 .00719
	747/1 ATI 03SI (CARRIER DATA)			GRADIENT	XYCP 25600 19509 15669	GRADIENT	XYCP 24912 19217 14218	GRADIENT	xYCP 22494 15431 10864 02592
- CA23B				L = 3.30	XZCP 3.24316 -1.14957 70670 92654	L = 3.30	XZCP 4.64369 -1.15481 70876 -1.24944	't = 3,30	XZCP 6.21326 -1.12412 70779 -1.61091
SOURCE DATA - CA23B	ARC 14-120(CA23B)		1339.9000 .0000 190.75001	3/ 0 RN/L =	ALPHAC 285 2.312 4.212 GRADIENT	+4/ 0 FN/L	ALPHAC 243 2.334 4.253 GRADIENT	45/ 0 RN/L	ALPHAC 254 2.332 4.248 GRADIENT
TABULATED		ATA	XMRP " YMRP " ZMRP "	RUN NO. 34	02 7.400 7.390 7.046	RUN NO. 34	9.858 9.858 9.870 9.840	RUN NO. 34	02 14.745 14.663 14.715
DATE 22 MAR 76		REFERENCE DATA	SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125						

CPSB2 .11895 .11603 .11312

CPSB1 .00135 .00767 .00665

CPCC .00107 .00630 .00693

XYCP -.23485 -.19217 -.13699

x2CP 60.85520 -1.07952 -70237 -14.18202

ALPHAC -.267 2.360 4.268 GRADIENT

DZ 29.743 29.911 29.627

-5.00/

GRADIENT INTERVAL

RUN NO. 346/ 0 RN/L = 3.29

5.00

-5.00/

GRADIENT INTERVAL

RUN NO. 347/ 0 RN/L = 3.30

CPSB2 .11561 .12210 .10437

CPSB1 .00591 .01218 -.00051

CPCC .00263 .00944 -.00537 -.00153

XYCP -.25015 -.2226 -.17463

xZCP -12.13530 -1.04204 -.68888 2.6230

ALPHAC -.235 2.345 4.291 GRADIENT

02 44.607 44.784 44.631

132	75		5.000. .000. .600.					75)		5.000.				
PAGE	134) (08 OCT	C DATA	STAB ELEVON B DX MACH					35) (08 OCT	C DATA	STAB = ELEVON = DX = MACH =				
	(BNH034)	PARAMETRIC						(BNH035)	PARAMETRI	00000				
		PAR	BETA RRUDDER RIORB R	5.00	CPSB2 .11854 .11818 .11259	5.00	CPSB2 .12087 .11773 .11566 00115		PAR	# # # # CC	5.00	CPSB2 .09228 .07109 .06451	5.00	CPSB2 .08664 .08779 .08167
	(CARRIER DATA)		88 50 60	-5.00/	CPSB1 .01329 .01247 .01148	-5.00/	CPSB1 .01228 .01157 .01060	R DATA)		BETA RUDDE DY	-5.00/	CPSB1 01908 02208 02170 0064	-5.00/	CPSB1 03253 01257 01060
	03SI (CARRIE			IT INTERVAL	CPCC . 01302 . 00920 . 00929	IT INTERVAL	CPCC .00846 .00830 .01006	03SI (CARRIER			T INTERVAL	CPCC01203017010187601876	T INTERVAL	CPCC 01995 00581 00383
	747/1 AT1 C			GRADIENT	XYCP 27066 21149 16914 .02253	GRADIENT	xYCP 27732 20577 15842 .02620	747/1 ATI 0			GRADIENT	XYCP -,17766 -,14253 -,09689 -,01898	GRADIENT	xYCP 18709 13338 09257
A - CA238	14-120(CA23B)		IN. XC IN. YC IN ZC	RN/L = 3.30	XZCP -12.55280 -1.04145 68776 2.73696	FN/L = 3.31	X2CP -11.52990 -1.03663 67977 2.46424	14-120(CA23B)		IN. XC IN. YC IN ZC	RN/L = 3.30	xZCP 164.01700 -1.25836 -75960 -39.71856	/L = 3.29	XZCP 37.00720 -1.17041 75083 -8.77880
SOURCE DATA	ARC 14-1		1339.9000 .0000 190.7500	348/ 0 RN	ALPHAC 239 2.361 4.269 GRADIENT	349/ 0 FN	ALPHAC 279 2.289 4.275 GRADIENT	ARC 14-1		1339.9000 .0000 190.7500	351/ 0 RN	ALPHAC .007 2.270 4.244 GRADIENT	352/ 0 RN/L	AL PHAC 212 2 . 387 4 . 282 GRADIENT
TABULATED SOUR)ATA	XMRP YMRP ZMRP	RUN NO.	DZ 49.960 50.084 50.051	RUN NO.	DZ 61.655 61.629 61.640		ATA	XMRP YMRP = ZMRP =	RUN NO. 3	02 3.392 3.273 3.233	PUN NO. 3	02 7.633 7.582 7.362
MAR 76		REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.						REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.				
DATE 22			SREF # LREF # BREF # SCALE #							SREF " LREF " BREF " SCALE =				

PAGE 133	(BNH035) (08 OCT 75)	4 + + C C C + C + C + C + C + C + C + C
	ARC 14-120(CA23B) 747/1 ATI 03SI (CARRIER DATA)	
TABULATED SOURCE DATA - CA238	ARC 14-120(CA23B)	
22 MAR 76		

(BNH035) (08 OCT 75)	PARAMETRIC DATA	. 000 STAB = 5.000 .000 ELEVON = .000 4.000 DX = .000 .000 MACH = .500		35 69 77 14		73.1 885 137 77.		PSB2 08892 10399 09869 00234		CPSB2 .08812 .09855 .09939 .00257
	_	BETA # RUDDER # 10RB # DY	5.00	CPSB2 .10635 .09669 .08777	5.00	CPSB2 .09531 .09485 .07237	5.00	υ	5.00	
R DATA)		RUG PQ	-5.00/	CPSB1 01147 01234 00457	-5.00/	CPSB1 02627 01476 02388	-5.00/	CPSB1 02133 00729 00451	-5.00/	CPSB1 02309 00921 00140
I (CARRIE!			INTERVAL	CPCC 00364 00290 .00056	INTERVAL	CPCC 01907 00963 01748	INTERVAL	CPCC 01575 00324 00128	INTERVAL	CPCC 02416 01029 .00265
747/1 ATI 03SI (CARRIER DATA)			GRADIENT	XYCP 19502 18729 08342	GRADIENT INTERVAL	XYCP -,16820 -,10567 -,07369	GRADIENT INTERVAL	xYCP 22740 17974 13502	GRADIENT	XYCP 23974 18637 14837
ARC 14-120(CA23B) 7		IN. XC IN. YC IN ZC	/	xZCP -700.68500 -1.16429 -74429 162.35378	FN/L = 3.29	xzcP -92.81610 -1.12704 72841 20.90085	RN/L = 3.29	x2CP -14.91500 -1.07645 70249 3.23404	RN/L = 3.30	XZCP -7.84328 -1.07270 69762
ARC 14-18		1339.9000 .0000 190.7500	353/ 0 RN/L	ALPHAC - 213 - 2.313 4.259 GRADIENT	354 / 0 KN	ALPHAC 270 2. 324 4. 304 GRADIENT	355/ 0 RN	ALPHAC 272 2. 346 4. 294 GRADIENT	356/ 0 Rh	ALPHAC 271 2.322 4.260 GRADIENT
	ATA	XMRP = ZMRP = ZMRP =	RUN NO.	02 9.664 9.916 9.803	RUN NO.	02 15.113 14.808 14.693	RUN NO.	02 29.891 29.979 29.891	RUN NO.	20 24, 44 299, 44 298, 44, 865
	REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.								

DATE 22 MAR 76

SREF = LREF = BREF = SCALE =

SREF = LREF = BREF = SCALE =

PAGE 134	(BNH036) (21 OCT 75
	ARC 14-120(CA23B) 747/1 ATI 03SI (CARRIER DATA)
CACSE CALL CACSE	ARC 14-120(CA23B)

									3
REFERENCE DATA	DATA			•			PARAMETRIC	RIC DATA	
500.0000 SO.FT 327.7800 IN. 348.0400 IN.	. XMRP YMRP ZMRP	= 1339.9000 = .0000 = 190.7500	IN. XC IN. YC IN ZC			8 8.00.70	BETA	0 STAB = 0 ELEVON = 0 DX = 0 MACH = 0	5.000 .000 .000
	RUN NO.	361/ 0 R	RN/L = 3.32	GRADIENT	GRADIENT INTERVAL =	-5.00/	5.00		
	DZ 1.654 2.469	ALPHAC 2.302 4.194 GRADIENT	XZCP -1.14169 68385 .24199	XYCP 49859 46469	CPCC 02087 00608	CPSB1 03101 01337 .00932	CPSB2 . 06905 . 08001		
	RUN NO.	362/ 0 Rt	RN/L = 3.31	GRADIENT	INTERVAL =	-5.00/	5.00		
	D2 2.877 3.365	ALPHAC 2.012 4.405 GRADIENT	XZCP -1.23931 65527 .24411	XYCP 51020 45550	CPCC 01401 00456 .00395	CPSB1 02496 01674	CPSB2 .07860 .08091		
	RUN NO.	363/ 0 RN	RN/L = 3.30	GRADIENT	INTERVAL *	-5.00/	5.00	:	
	DZ 7.393 7.226	ALPHAC 2.013 4.376 GRADIENT	XZCP -1.21638 67040	XYCP 50989 47570	CPCC 01897 00814 00459	CPSB1 02698 01653	CPSB2 .08163 .07960 00086		
	RUN NO.	364/ 0 RN	RN/L = 3.30	GRADIENT	INTERVAL =	-5.00/	5.00		
	DZ 9.858 10.104	ALPHAC 2.049 4.457 GRADIENT	XZCP -1.18023 66621 .21344	XYCP 51373 47412	CPCC 01709 00247	CPSB1 02727 01141	CPSB2 .08365 .08745 .00158		
	RUN NO.	365/ 0 RN	RN/L = 3.29	GRADIENT	INTERVAL =	-5.00/	5.00		
	02 14.553 14.643	ALPHAC 2.097 4.474 GRADIENT	XZCP -1.14245 66153	XYCP 51440 47149	CPCC018160162700079	CPSB1 03074 02163	CPSB2 .08360 .07586 00326		
	RGN NO.	366/ 0 RN	RN/L = 3.29	GRADIENT	INTERVAL =	-5.00/	5.00		
	D2 29.819 29.992	ALPHAC 2.159 4.411 GRADIENT	XZCP -1.06316 66163 .17836	xYCP 52173 48221	CPCC 01907 00091	CPSB1 02443 00770	CPSB2 .086 31 .09280 .0028 8		

22 MAR 76	TABULATED	SO	- CA238		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	į	•		PAGE	135
		ARC 14-16	ARC 14~120(CA23B) 7	747/1 ATI 03SI (CARRIER DATA)	I CARRIER	DATA	_		_	
REFERENCE DATA	ΤA						PARAM	PARAMETRIC	DATA	
5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.	XMRP YMRP	. 0000 . 0000 190.7500	IN. XC IN. YC IN ZC			BETA RUDDE 10RB DY		0000.000	STAB = ELEVON = DX = MACH =	5.000
	RUN NO. 3	367/ 0 RN/L	/1 = 3.29	GRADIENT	INTERVAL =	-5.00/	5.00			
·	02 45.057 44.937	ALPHAC 2.052 4.371 GRADIENT	x2CP -1.10125 67327	xycP 52932 47958 .02145	CPCC 01712 .00013	CPSB1 02303 00880	CPSB2 .08681 .10027 .00580			
	RUN NO. 3	368/ 0 RN/L	/L = 3.30	GRADIENT	INTERVAL =	-5.00/	5.00			
	DZ 50.129 50.420	ALPHAC 2.015 4.439 GRADIENT	XZCP -1.14599 64462	XYCP 53569 47697 .02422	CPCC 01688 00296 .00574	CPSB1 02279 00705	CPSB2 .08757 .10050 .00534			
	RUN NO. 3	369/ 0 RN/L	/L = 3.30	GRADIENT	INTERVAL =	-5.00/	5.00	-		
	02 62.057 61.853	ALPHAC 2.140 4.416 GRADIENT	xZCP -1.02573 65643 .16220	XYCP 51827 47569 .01870	CPCC 01557 01056 .00220	CPSB1 00215 .00116	CPSB2 .07892 .10003			
		ARC 14-1	ARC 14-120(CA23B) 7	747/1 AT1 03	03SI (CARRIER	DATA		(BNH037)	7) (08 OCT	1 75)
REFERENCE DATA	ATA						PARAI	PARAMETRIC	DATA	
5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.	XMRP # YMRP # ZMRP #	1339.9000 .0000 190.7500	IN. XC IN. YC IN ZC			BETA RUDDI 10RB V	# # # # E	0000	STAB = ELEVON = DX = MACH =	-1.000 .000 .000 .600
	RUN NO.	371/ 0 RN	RN/L = 3.33	GRADIENT	GRADIENT INTERVAL =	-5.00/	5.00			
	02 1.955 1.879 1.932	ALPHAC , 521 2, 297 4, 335 GRADIENT	xZCP -2.94599 1.81194 .44568	XYCP 18508 12834 08540	CPCC 02881 02718 01551	CPSB1 04126 04308 02727	CPSB2 .06207 .05788 .06653			

SREF LREF BREF SCALE

(08 OCT 75

(BNH037)

-1.000 .000 .000 .600 STAB ELEVON DX MACH PARAMETRIC DATA .000 .000 **6**.000 CPSB2 .07010 .07308 .06741 CPSB2 .08926 .06840 .06975 .06797 .07073 .06423 CPSB2 .07957 .06681 .07398 5.00 5.00 BETA RUDDER 10R8 5.00 5.00 CPSB1 -.03980 -.02875 -.02596 CPSB1 -.03083 -.03154 -.01955 -5.00/ CPSB1 -.03460 -.02559 -.02464 CPSB1 -.02555 -.03502 -.02869 -.00079 -5.00/ -5.00/ -5.00/ -5.00/ GRADIENT INTERVAL CPCC -.02868 -.01431 -.01766 -.00262 CPCC -.02480 -.01353 -.01364 CPCC -.02205 -.03157 -.02035 CPCC -.03110 -.03181 -.01901 GRADIENT INTERVAL GRADIENT INTERVAL GRADIENT INTERVAL GRADIENT INTERVAL XYCP -.21197 -.11326 -.08503 XYCP -.18236 -.09699 -.06457 XYCP -.16776 -.07022 -.06214 XYCP -.12781 -.06054 -.03783 3.32 FN/L = 3.32 RN/L = 3.32 RN/L = 3.31 RN/L = 3.31 xZCP -1.77135 1.42633 .40531 .52495 x2CP -1.78509 1.01363 .34106 .50936 x2CP -1.96877 1.10677 .29295 xZCP -2.44757 .96177 .25681 .62865 1339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC RN/L = ALPHAC -.096 2.401 4.474 GRADIENT ALPHAC -.184 2.515 4.363 GRADIENT -.073 2.415 4.372 GRADIENT ALPHAC . 036 2.374 4.458 GRADIENT AL PHAC RUN NO. 372/ 0 373/ 0 RUN NO. 374/ 0 375/0 376/0 02 10.003 9.942 10.030 D2 3.611 3.412 3.341 D2 7.238 7.611 7.497 DZ 14.990 14.729 14.795 RUN NO. RUN NO. RUN NO. XMRP YMRP ZMRP REFERENCE DATA 5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.

CPSB2 .07599 .06961 .08207

CPSB1 -.03195 -.03192 -.01670

CPCC - . 03354 - . 03219 - . 01187 . . 00469

XYCP -.20160 -.13270 -.09510

XZCP -2.76896 .71669 .17341

ALPHAC -.037 2.359 4.506 GRADIENT

02 29.795 29.929 30.138

137	1 75 1		-1.000 .000 .000 .600							1 75)		5.000 5.000 .000 .600		
PAGE	(7) (08 OCT	DATA	STAB # ELEVON # DX MACH #							38) (08 OCT	C DATA	SIAB = ELEVON = DX = MACH =		
	(BNH037)	PARAMETR1C	0000							(BNH038)	PARAMETRIC			
		PARA	3 3 1 1 6	5.00	CPSB2 .07512 .08931 .08561	5.00	CPSB2 .07363 .08709 .08278	5.00	CPSB2 .07182 .08410 .06966		PAR	H 11 H H	5.00	CPSB2 .10438 .09273 .09220 .00284
	DATA)		BETA RUDDEI 10RB DY	* -5.00/	CPSB1 02727 01191 01818	-5.00/	CPSB1 02990 01858 01915	-5.00/	CPSB1 02998 01837 02480	R DATA)		BETA RUDDE 10RB DY	* -5.00/	CPSB1 02086 01742 01633
	03S1 (CARRIER			INTERVAL	CPCC 02966 01138 01603	INTERVAL	CPCC 03096 02074 01618	INTERVAL	CPCC 03237 01648 02613	O351 (CARRIER			T INTERVAL	CPCC 02193 01769 01149 00240
	747/1 AT1 03			GRADIENT	XYCP 23377 -,14491 -,12923	GRADIENT	XYCP 23368 14974 12874 .02345	GRADIENT	XYCP 21753 14095 12582	747/1 AT1 0			GRADIENT	XYCP 24748 17348 17348
- CA238			IN. XC IN. YC	L = 3.32	xZCP -2.20770 .4950 6 .16022	L = 3.31	x2CP -4.00969 .57429 .13316	1 = 3.31	x2CP -4.35894 .50479 .13185 1.04582	ARC 14-120(CA238)		IN. XC IN. YC IN ZC	/L = 3.34	XZCP 1,45142 -,83623 -,50517 -,45766
SOURCE DATA	ARC 14-120(CA238)		1 339.9000 1 0000 1 0007.081	377/ 0 RN/L	ALPHAC 096 2.497 4.260 GRADIENT	378/ 0 FN/L	AL PHAC .036 2.316 4.524 6RADIENT	379/ 0 RN/L	AL PHAC 013 2.379 4.408 GRADIENT	ARC 14-13		1339.9000 .0000 190.7500	381/ 0 RN/L	ALPHAC .046 2.293 4.387 GRADIENT
TABULATED		ATA	XMRP # ZMRP #	RUN NO. 3	02 45.027 44.952 44.914	RUN NO. 3	02 50.481 50.592 50.369	RUN NO. 3	02 61.632 61.965 61.651)ATA	XMRP # ZMRP #	RUN NO.	02 1.603 1.569 2.306
MAR 76		REFERENCE DAT	5500.0000 SO.FT. 327.7800 IN. 2348.0400 IN.								REFERENCE DAT	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.		
DATE 22 M			SREF = LREF = BREF = SCALE =		DRIGI DF, Po	AN TOC	L PAGE ! QUALIT	is Y				SREF * LREF * BREF * SCALE *		

(BNH038) (08 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

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C DATA	STAB ELEVON EDX MACH		ı								
PARAMETR1C											
PAR	1A 2068 = 1 38 = 1	5.00	CPSB2 .09199 .09279 .09483	5.00	CPSB2 .08877 .09745 .08710	5.00	CPSB2 .09322 .09632 .09090	5.00	CPSB2 .08754 .09661 .09433	5.00	CPSB2 .08977 .09886 .08509
	88 100 100 100 100 100 100 100 100 100 1	-5.00/	CPSB1 02781 02154 01172	-5.00/	CPSB1 03118 01810 01998	-5.00/	CPSB1 02901 01816 01651	-5.00/	CPSB1 03122 01619 01279	-5.00/	CPSB1 02787 01279 02473
		GRADIENT INTERVAL	CPCC0296601751014410352	T INTERVAL	CPCC 03118 01521 01781	T INTERVAL	CPCC034860170801489	T INTERVAL	CPCC 03255 01889 01414	T INTERVAL	CPCC 03054 01630 02100
		GRADIEN	××CP 28775 18270 02414	GRADIENT	XYCP 25028 19849 17718	GRADIENT	XYCP 22687 19481 17389	GRADIENT	XYCP 24969 19340 16619	GRADIENT	xYCP 25363 16985 01836
	IN. XC IN. YC IN ZC	/L = 3.33	XZCP 1.96777 84050 52386 58539	1 = 3.33	X2CP 3.32970 87295 55707 90556	1. * 3.32	XZCP 7.61963 90244 56966 -1.88313	1 = 3.32	XZCP 3.23423 91278 60026 88490	'L = 3.32	x2cP -17.29290 95607 65588 3.80243
	1339.9000 .0000 190.7500	382/ 0 RN/L	ALPHAC .019 2.422 4.425 GRADIENT	383/ 0 FN/L	ALPHAC 027 2.422 4.419 GRADIENT	384/ 0 RN/L	ALPHAC 047 2 409 4.489 GRADIENI	385/ 0 RN/L	ALPHAC - 141 2.495 4.418 GRADIENT	386/ 0 RN/L	ALPHAC 165 2.497 4.402 GRADIENT
DATA	XMRP YMRP ==	RUN NO.	D2 3.458 3.699 3.469	RGN NO.	DZ 7.736 6.902 7.339	P.ON NO.	02 10.309 9.703 10.031	RUN NO.	02 15.037 14.856 14.876	RUN NO. 3	DZ 30.004 29.815 30.280
REFERENCE DATA	SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125										

139	(57		5.000 5.000 .000 .600							1 27		5.000 5.000 .000 .600		
PAGE	(08 OCT	DATA	STAB " ELEVON " DX "							39) (08 OCT	C DATA	STAB = ELEVON = DX = MACH =		
	(BNH038)	PARAMETRIC	.000							(BNH038)	PARAMETR1C	.000 0.000 6.000		
		PARA	8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	5.00	CPSB2 .09703 .10451 .10272	5.00	CPSB2 .08593 .10315 .10350	5.00	CPSB2 .08493 .09444 .00360		PAR		5.00	CPSB2 .07800 .07452
	(DATA)		BETA RUDDER 10RB DY	-5.00/	CPSB1 03089 01681 01390	-5.00/	CPSB1 03050 01722 01241	-5.00/	CPSB1 03235 02025 .00458	R DATA)		BETA RUDDI 10RB DY	-5.00/	CPSB1 03392 02592
	03SI (CARRIER			INTERVAL	CPCC 02715 01762 01390	INTERVAL	CPCC032110188500969 .00519	INTERVAL	CPCC 03020 02079 .00356	OZSI (CARRIER DATA)			T INTERVAL	CPCC 01865 01043
	747/1 AT1 03			GRADIENT	xYCP 23216 19139 16409	GRADIENT	XYCP 23924 16467 01713	GRADIENT	XYCP 24393 19812 .01733	747/1 AT1 0			GRADIENT	XYCP 46302 44281 .01078
- CA23B	14-120(CA23B). 7		IN. XC IN. YC IN ZC	L = 3.31	xZCP -4.18970 96982 65011	L = 3.30	x2CP -4.92873 94454 67468 1.02499	ال = 3.30	xzcP -9.00624 95206 3.04628	14-120(CA23B)		IN. XC IN. YC IN ZC	RN/L = 3.36	xZCP 90506 54597 .19154
SOURCE DATA	ARC 14-12		1339.9000 .0000 190.7500	387/ 0 RN/L	AL: HAC .070 2.481 4.448 GRADIENT	388/ 0 FN/L	ALPHAC 037 2.513 4.284 GRADIENT	389/ 0 RN/L	ALPHAC 115 2.529 GRADIENT	ARC 14-18		1339.9000 .0000 190.7500	391/0 RN	ALPHAC 2.388 4.263 GRADIENT
TABULATED		1TA	XMRP # ZMRP #	RUN NO. 3	DZ 44.879 44.946 44.926	RUN NO. 3	02 49.971 50.192 50.609	RUN NO. 3	02 61.515 60.520)ATA	XMRP YMRP ZMRP # # #	RUN NO.	02 3.148 3.390
DATE 22 MAR 76		REFERENCE DATA	SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125								REFERENCE DATA	SREF = 5500.0000 SO.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE * .0125		

SREF = LREF = BREF = SCALE =

DATE 22 MAR 75		REFERENCE DATA	SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125				u pagi	a 16					
TABULATED		ATA	XMRP YMRP ZMRP ===	RUN NO.	02 3.048 3.021 3.274	RUN NO.	02 7.066 7.198 7.335	RUN NO.	02 9.793 9.766 9.745	RUN NO.	02 14,781 14,685 14,592	RUN NO.	02 29.804 29.944 29.835
SOURCE DATA	ARC 14-1		1339.9000 .0000 190.7500	401/ 0 RN	ALPHAC 004 318 401 GRADIENT	402/ 0 FIN	ALPHAC 091 2.490 4.405 GRADIENT	403/ 0 RN	ALPHAC .024 2.449 4.293 GRADIENT	404/ 0 RN	ALPHAC 155 2.568 4.303 GRADIENT	405/ 0 R	ALPHAC - 120 2.563 4.329 GRADIENT
A - CA23B	-120(CA23B) 7		IN. XC IN. YC IN ZC	RN/L = 3.33	XZCP 6.81192 -1.06919 66173	FN/L = 3.32	xZCP 11.51960 -1.02612 67117 -2.83228	RN/L = 3.32	XZCP -37.22160 -1.04920 68871 B.88333	RN/L = 3.32	xZCP 12.07500 98470 69195	RN/L = 3.33	XZCP -19.91820 99420 69584 4.54461
	747/1 AT1 02S1			GRADIENT	XYCP 24448 22140 18574	GRADIENT	xYCP 26316 22881 18566	GRADIENT	XYCP 26275 18728 18729	GRADIENT	XYCP 27966 21586 18237 .02197	GRADIENT	xYCP 24631 15210 .02095
	SI (CARRIER			INTERVAL =	CPCC 02201 03423 02026	INTERVAL	CPCC 02063 01943 03059	INTERVAL	CPCC02441019130170401704	INTERVAL	CPCC 03276 01788 02525 .00202	INTERVAL	CPCC02548015620170600201
	DATA		BETA RUDDI 10RB DY	-5.00/	CPSB1 02878 03984 02270	-5.00/	CPSB1 02361 02132 03299	* -5.00/	CPSB1 03036 01994 02512	-5.00/	CPSB1 03730 02031 02845	-5.00/	CPSB1 02791 01769 01598
	J	PARAM	0 H H H	5.00	CPSB2 . 08545 . 06213 . 07670	5.00	CPSB2 . 09525 . 08412 . 06193	5.00	CPSB2 .08871 .08110 .07591	5.00	CPSB2 .07418 .08235 .06636	5.00	CPSB2 .08652 .08626 .08230
	(BNHO+0)	PARAMETRIC	0000										
PAGE	100 80) (DATA	STAB == ELEVON == DX == MACH ==		í								
1 1	1. 27.		5.000 5.000 .000 .000										·

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1 75 T		5.000 6.000 6.000			:T 75)		5.000 5.000 .000				e			
40) (0B OCT	C DATA	STAB F.EVON # DX MACH #			+1.) (08 OCT	C DATA	STAB ELEVON BOX							
(BNH0+0)	PARAMETR1C				(BNH0+1)	PARAMETR1C								
	PAR	N H H H CC	5.00	CPS82 .07282 .08558 .07945		PAR/	9 H H H	5.00	CPSB2 .07289 .06335	5.00	CPSB2 .07342 .06382 00408	5.00	CPSB2 .07686 .07125	
R DATA)		BETA RUDDI 10RB DY	-5.00/	CPSB1 03297 01609 01651	R DATA)		BETA RUDDE 10RB DY	-5.00/	CPSB1 02734 03350 00285	-5.00/	CPSB1 02806 03111	-5.007	CPSB1 02438 02649	
PSI (CARRIER DATA)			INTERVAL	CPCC 02950 01366 01948	O2SI (CARRIER			INTERVAL	CPCC 02879 02555	INTERVAL	CPCC 02770 02638 .00056	INTERVAL	CPCC 02620 02721 00045	
747/1 AT1 0251			GRADIENT	XYCP 23410 18946 14233 .01999	747/1 AT1 06			GRADIENT	xYCP 19080 16938	GRADIENT	XYCP 20468 16439	GRADIENT	XYCP 20276 16504 .01675	
RC 14-120(CA23B)		IN. XC IN. YC IN ZC	1 = 3.33	xzcP -8.84545 -1.02431 66923 1.84325	14-120(CA23B) 7		IN. XC IN. YC IN ZC	/L = 2.97	x2cP -1.15480 66194 .22807	1 = 2.96	X2CP -1.11233 65947 .19239	/ل = 2.98	X2CP -1.07042 66793 .17875	
ARC 14-1		1339.9000 .0000 190.7500	405/ 0 RN/L	ALPHAC 091 2.446 4.476 GRADIENT	ARC 14-13		1339.9000 .0000 190.7500	411/ 0 RN/L	ALPHAC 2.137 4.298 GRADIENT	412/ 0 RN/L	ALPHAC 2.085 4.439 GRADIENT	413/ 0 RN/L	ALPHAC 2.218 4.469 GRADIENT	
	DATA	XMRP YMRP ZMRP	RUN NO.	DZ 44.515 44.728 44.671		ATA	XMRP YMRP #	RUN NO. 4	02 3.328 3.325	RUN NO. 4	02 6.838 7.184	RUN NO. 4	02 9.770 9.780	
	REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.				REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.							
		SREF = LREF # BREF # SCALE #					SREF = LREF = BREF = SCALE *							

PAGE 143 (BNH041) (08 OCT 75)	PARAMETRIC DATA	. 000 STAB = 5.000 . 000 ELEVON = 5.000 4.000 DX = .000 . 000 MACH = .500							(BNH042) (08 OCT 75)	PARAMETRIC DATA	.000 STAB = 5.000 .000 ELEVON = 5.000 4.000 DX = .000 .000 MACH = .300				
	PAR	BETA ** RUDDER = 10RB ** DY = 1	5.00	CPSB2 .04939 .04893 00019	5.00	CPSB2 .07164 .07061 00047	5.00	CPSB2 .05670 .04492		PAI	BETA RUDDER IORB R	5.00	CPSB2 05938 .00423	5.00	CBRBD
ER DATA)		8 8.00 ₽	.= -5.00/	CPSB1 04398 03852	-5.00/	CPSB1 02405 01932 .00215	5.00/	CPSB1 03645 04037 00185	IER DATA)		8 6 - 6	L = -5.00/	CPSB1 14534 08095	1 = -5.00/	נמטמר
0251 (CARRIER			ENT INTERVAL	CPCC -, 04863 -, 04174 -, 00281	ENT INTERVAL	CPCC 03094 02294 02594	ENT INTERVAL	CPCC -,04145 -,04718 -,00271	O2SI (CARRIER			ENT INTERVAL	CPCC 15411 08272 03548	IENT INTERVAL	راطان
747/1 AT1			97 GRADIENT	XYCP 20394 15856 01849	.97 GRADIENT	XYCP 17656 14474 .01447	.97 GRADIENT	XYCP 17245 13659 .01695	747/1 AT!			.98 GRADIENT	XYCP 14807 12816 00990	.98 GRADIENT	XYCP
URCE DATA - CA23B ARC 14-120(CA23B)		0 IN. XC 0 IN. YC 0 IN ZC	RN/L = 2.	x2CP -1.15583 67103 .19751	RN/L = 2.	XZCP -1.06478 67879 -17546	RN/L = 2.	x2CP +1.02392 67845	14-120(CA23B)		00 IN. XC 00 IN. YC 00 IN ZC	RN/L = 1.	xZCP 998826 165050 116785	RN/L = 1	47CP
S		1339.9000 .0000 .190.7500	0 /+1+	ALPHAC 9 1.286 9 4.441 GRADIENT	415/ 0	ALPHAC 8 2.215 6 4.15 GRADIENT	416/ 0	ALPHAC 18 2.214 14 4.330 19 GRADIENT	ARC 14		1339.9000 .0000 190.7500	. 421/ 0	ALPHAC P. 209 P. 221 GRADIENT	. 422/ 0	C 4 1 0 1 4
TABULATED	E DATA	FT. XMRP YMRP ZMRP	RUN NO.	02 14.789 14.819	RUN NO.	02 29.638 29.826	RUN NO.	70 824.44 854.44		CE DATA	50.F1. XMRP IN. YMRP IN. ZMRP	RUN NO.	DZ 3.128 3.123	RUN NO.	
DATE 22 MAR 76	REFERENCE DATA	SREF = 5500.0000 SQ.F' LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125								REFERENCE DATA	SREF = 5500.0000 SO. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125				

(BNH042) (08 OCT 75)

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DATA)
(CAPR I ER
0251
747/1 AT1
14-120(CA23B)
ARC 14

IC DATA	STAB = 5.000 ELEVON = 5.000 DX = .000 MACH = .300			.					
PARAMETRIC DATA	BETA	5.00	CPSB2 04983 .00774 .02657	5.00	CPSB2 -, 05088 -, 04861 . 00588	5.00	CPSB2 04365 . 00980 . 02544	5.00	CPSB2 .01537 .01347 00140
	<u> </u>	-5.00/	CPSB1 14007 07297 .03096	-5.00/	CPSB1 15697 14296	-5.00/	CPSB1 14002 07547 .03072	-5.00/	CPSB1 07403 07152
		GRADIENT INTERVAL	CPCC 14445 08184 .02889	INTERVAL	CPCC ,15348 ,14908 -,00211	GRADIENT INTERVAL	CPCC 14265 06659 03620	GRADIENT INTERVAL	CPCC 08289 07506
		GRADIENI	XYCP 14275 12707 .00724	GRADIENT	XYCP 13829 12075 .00840	GRADIENT	XYCP 12777 10617 .01028	GRADIENT	XYCP 11757 09983
	IN. XC IN. YC IN ZC	RN/L = 1.98	XZCP -1.01386 66128	RN/L = 1.98	XZCP -1.00470 66324 .16356	RN/L = 1.97	x2CP -1.03721 68210	RN/L = 1.97	xZCP -1.01339 70006
	1339.9000 IN. XC .0000 IN. YC 190.7500 IN 2C	423/ 0 RI	ALPHAC 2.180 4.347 GRADIENT	424/ 0 R	ALPHAC 2.266 4.354 GRADIENT	425/0 R	ALPHAC 2.191 4.292 GRADIENT	0	ALPHAC 2.202 4.266 GRAD ENT
ATA	XMRP = ZMRP =	RUN NO.	02 9.285 9.970	RUN NO.	DZ 14.488 14.575	RUN NO.	DZ 29.804 29.724	RUN NO. 426/	DZ 44.766 44.688
REFERENCE DATA	= 5500.0000 SQ.FT. = 327.7800 IN. = 2348.0400 IN. = .0125								

145	75)		5.000 .000 .000		CBL 00061 00083 00005		CBL 00062 00083 00079		CBL 00082 00114 00096 00004		CBL 00090 00112 00094		CBL 00096 00120 00118
PAGE	(08 OCT	DATA	STAB = ELEVON = DX HACH =		CYN .00119 .00098 .00072 00011		CYN .00117 .00104 .00070 00010		CYN .00102 .00070 .00071		CYN . 00099 . 00059 . 00059		CYN .00099 .00082 .00012
	(CNH008)	PARAMETRIC D	2 000. 2 000. 3 000.		CY .00383 .00384 .00373 00002		CY .00320 .00327 .00349		CY .00254 .00154 .00337		CY .00262 .00277 .00347		CY .00228 .00237 .00317
		a.	BETA = RUDDER = 10RB = DY	/ 5.00	CLM .01796 .02524 .03238	/ 5.00	CLM .01310 .02247 .02950 .00366	1 5.00	CLM .01168 .02208 .02830	00.5 /(CLM .01060 .02063 .02723	00/ 5.00	CLM .00807 .01850 .02378
	(ORBITER DATA)			AL = -5.00/	. 07449 . 07990 . 09462	AL = -5.00,	. 07116 . 08152 . 09718 . 00573	AL = -5.00	. 07182 . 08185 . 09774 . 00562	/AL = -5.00/	.07311 .08350 .10173	.5-	CD .07457 .08663 .10374
	0251			GRADIENT INTERVAL	CL . 32322 .34335 .41083	GRADIENT INTERVAL	CL .29147 .35258 .42281 .02906	GRADIENT INTERVAL	CL . 29271 . 35522 .42160 .02820	GRADIENT INTERVAL	CL .29345 .36068 .43824 .03195	GRADIENT INTERVAL	CL .29030 .37193 .44641
60	1 747/1 ATI			3.35 GRAD	DY 20623 -20371 -23854 -10961	3.35 GRAD	DY 34829 32784 49519	3.36 GRAE	DY 54241 44705 42173	3.35 GRA	07 -,49569 -,33369 -,43565	3.35 GRA	DY 41648 32859 42608 00008
DATA - CA23B	14-120(CA23B		00000 IN. XO 00000 IN. YO 00000 IN. ZO	RN/L = 3	. 02554 05088 08104 02607	EN/L =	DX 12176 .00073 08161	RN/L =	DX 16650 .04687 06067	RN/L =	0x 10545 .02080 10713	RN/L =	DX 09164 .00094 13705
TABULATED SOURCE	ARC 1		00.0011 = 0.00 00. = 3.75.00	81/0	A. PHAO 6.79528 8.20568 10.25770	82/ 0	ALPHA0 6.00552 8.29366 10.30330	. 83/ 0	ALPHA0 6.01990 8.26560 10.30680	. 84/ 0	ALPHA0 6.14126 8.39154 10.47500	. 85/ 0	ALPHA0 6.09616 8.37419 10.26970
TABULA		DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH .58953 .58961 .59037 .00020	RUN NO	MACH . 58956 . 58924 . 59180	RUN NO	MACH . 59169 . 59244 . 59008	RUN NO	MACH .59254 .59202 .59069	RUN NO	MACH . 59150 . 59156 . 59173
R 76		REFERENCE DATA	2690.0000 SQ.F 474.8100 IN. 936.6800 IN.		ALPHAC . 192 2.364 4.308 GRADIENT		ALPHAC 126 2.378 4.361 GRADIENT		ALPHAC 141 2.414 4.401 GRADIENT		ALPHAC 014 2.461 4.492 GRADIENT		ALPHAC 028 2.464 4.306 GRAD1ENT
DATE 22 MAR	,		SREF = 21 LREF = 1 BREF = 5		02 4.365 2.954 3.443		02 6.994 7.541 7.335		02 9.751 9.637 9.522		02 14.752 15.063 15.188		02 29.536 29.860 29.902

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

1 75 1		5.000 5.000 .000 .000		CBL 00987 00113 00113		CBL 00092 00091 00091	1 75)		-1.000 5.000 .000		CBL 00080 00050 00070		CBL001010007300067 .00008
B) (0B OCT	DATA	STAB = ELEVON = DX = MACH =		CYN .00091 .00071 .00038		CYN .00084 .00079 .00036	3) (08 OCT	DATA	STAB = ELEVON = OX = MACH =		CYN .00072 .00059 00023		CYN . 00089 . 00064 - 00026
(CNH008)	PARAMETRIC			CY .00179 .00183 .00287		CY .00155 .00194 .00270	(CNH009)	PARAMETRIC	8.000 000.		CY .00436 .00555 .00565		CY .00358 .00507 .00581
		BETA # RUDDER # 10RB # DY	00/ 5.00	CLM .00551 .01673 .02206	00/ 5.00	CLM .00605 .01637 .02127			BETA # RUDDER # 10RB # DY #	.00/ 5.00	CLM .02196 .02713 .03283	00/ 5.00	CLM . 01955 . 02618 . 03168
(ORBITER DATA)				CD .07578 .08855 .10787	= .5.	CD .07559 .08955 .10770	(ORBITER DATA)			i I	CD .09300 .10281 .12890	# - C	. 08505 . 10506 . 12987 . 12987
AT1 0251 (0R			GRADIENT INTERVAL	CL . 28755 . 37755 . 46+97 . 03994	GRADIENT INTERVAL	CL . 28716 . 38105 . 46418 . 03963	AT1 0251 (OR			GRADIENT INTERVAL	CL .44169 .46721 .54411	GRADIENT INTERVAL	CL .39464 .47117 .54829 .03500
1/447			3.35 GRA	DY -,48477 -,48370 -,52900 -,00939	3.34 GRA	07 54456 44509 49766	747/1			3.35 GRA	0Y 48266 50319 54526 01535	3.35 GRA	DY -,47456 -,44624 -,55214 -,01611
14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	DX 08155 00515 21858 02730	EN/L =	0x .05961 20322 19609	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	DX -2.26005 15449 09343	RN/L =	0x 14314 03294 06267
ARC		# 1109.	. 86/ 0	ALPHAO 6.08741 8.78191 10.32980	. 87/ 0	ALPHAO 6.00790 8.42595 10.27840	ARC		# 1109. # 375.	0 /16 .	ALPHAO 8.98241 10.26110 12.33510	. 927 0	ALPHAO 8.14574 10.44690 12.29420
	REFERENCE DATA	FT. XMRP. YMRP. ZMRP	RUN NO	MACH . 59219 . 59329 . 59219	RUN NO	MACH . 59335 . 59218 . 59202 00031		E DATA	. FT. XMRP . YMRP . ZMRP	RUN NO	MACH .59107 .59100 .59115	RUN NO	MACH .59119 .59200 .59032
	REFEREN	2690.0000 SQ 474.8100 IN 936.6800 IN		ALPHAC 065 2.496 4.342 GRADIENT		ALPHAC 106 2.490 4.334 GRADIENT		REFERENCE DATA	2690.0000 SQ. 474.8100 IN. 936.6800 IN.		AL PHAC .274 2.380 4.334 GRADIENT		ALPHAC015 2.498 4.339 GRAD:ENT
		SREF # 2 LREF # 2 BREF # SCALE #		DZ 44.873 44.666 45.029		DZ 50.039 50.412 50.166			SREF = 2 LREF = BREF = SCALE =		002 8.075 7.276 7.800		DZ 9.930 10.158 9.843

147	175)		5.000 5.000 .000		CBL 00103 00096 00074 .00006		CBL 00127 00103 00055		CBL 0011B 00094 00076		CBL 00122 00104 00062
PAGE) (08 OCT	DATA	STAB # ELEVON # OX MACH #		CYN .00067 .00035 00036		CYN .00066 .00020 00048		CYN .00077 .00018 00043		CYN .00072 .00004 00062
	(CNH008)	PARAMETRIC	0000.8		CY .00241 .00373 .00584		.00251 .00418 .00608		CY .00261 .00351 .00547 .00060		CY .00297 .00354 .00481
			BETA ERUDDER EIORB EIORB	2.00	CLM .01778 .02489 .02962 .00268	/ 5.00	CLM .01596 .02256 .02682 .00248	/ 5.00	CLM .01335 .02038 .02436	1/ 5.00	CLM .01410 .02015 .02332
	0251 (ORBITER DATA)			/AL = -5.00/	CD .08490 .10540 .13221	VAL = -5.00/	.08726 .11019 .13909	VAL = -5.00/	.08671 .10999 .14554	VAL = -5.00/	CD .08864 .11279 .14506
				GRADIENT INTERVAL	CL .38716 .47076 .55332	GRADIENT INTERVAL	CL .39182 .48686 .57798	GRADIENT INTERVAL	CL .37731 .48328 .59809 .04695	GRADIENT INTERVAL	CL .38959 .49604 .59731
38	B) 747/1 AT1			3.35 GRA	38124 47713 54510 03699	3.35 GRA	07 52747 43116 56262 00504	3.34 GR/	0Y 57621 44672 47087	3.35 GR	.51299 -,51299 -,48408 -,45860
DATA - CA23B	ARC 14-120(CA23B)		1000 IN. XO 1000 IN. YO 1000 IN. ZO	RN/L .	DX 13258 .00278 12014	FN/L =	DX 14976 09792 14966	RN/L =	0X 04396 06445 18625 02950	RN/L =	0x 00083 12157 02516
TABULATED SOURCE DATA	ARC		= 1109.0000 = .0000 = 375.0000	93/0	ALPHAC B.04677 10.40940 12.32420	0 /+6	ALPHAO B.10042 10.47820 12.31910	95/ 0	ALPHA0 7.89170 10.32970 12.45260 197370	0 /96	ALPHA0 8.07496 10.48780 12.38500 .95078
TABULA		E DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH .59246 .59206 .59336	RUN NO.	MACH .59233 .59264 .59102	RUN NO.	MACH .59190 .59246 .59147 -,00008	RUN NO.	MACH .59172 .59179 .59307 .00028
AR 76		REFERENCE DATA	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN. .0125		ALPHAC 101 2.534 4.322 GRADIENT		ALPHAC 027 2.539 4.355 GRADIENT		ALPHAC 192 2.406 4.485 GRADIENT		ALPHAC 078 2.550 4.393 6RADIENT
DATE 22 MAR 76			SREF # LREF # BREF # SCALE *		02 14.862 14.490 15.108		02 29.926 29.957 29.720		02 44.465 44.798 44.826		D2 50.555 50.407 50.452

ORIGINAL PAGE IS

TABULATED SOURCE DATA - CA23B

F 148	1 75 1		5.000 .000 .000		CBL 0n:12 00102 00069		CBL 00107 00069 00045		CBL 00124 00099 00085		CBL 00129 00099 00068		CBL 00131 00075 00094	
PAGE) (08 OCT	DATA	STAB = ELEVON = DX MACH =		CYN .00089 .00035 00035		CYN .00086 .00045 00052		CYN .00073 .00027 00052		CYN .00065 .00006 00055		CYN .00064 .00009 00049	
	(CNHO10)	PARAMETR1C	0000.8		CY .00359 .00528 .00528		CY .00292 .00408 .00559		CY .00244 .00522 .00560		CY .00170 .00329 .00410		CY .00162 .00368 .00374 .00048	
			BETA # RUDDER # 10RB # DY	0/ 5.00	CLM .02173 .02713 .03225	0/ 5.00	CLM .01936 .02591 .03085	7/ 5.00	CLM .01831 .02939 .00243	0/ 5.00	CLM .01619 .02628 .02652	0/ 5.00	CLM .01515 .02435 .00204	
	(ORBITER DATA)			/AL = -5.00/	.08455 .08455 .10446 .13110	/AL = -5.00/	CD .08500 .10575 .13557 .01098	/AL = -5.00,	. 08571 . 10654 . 13713	AL = -5.00/	. 08753 . 11075 . 14282 . 01215	AL = -5.00/	. 08840 . 11364 . 14740 . 01286	
	AT1 0251 (OR			GRADIENT INTERVAL	CL .39792 .47605 .55401 .03769	GRADIENT INTERVAL	CL .39677 .48054 .56640	GRADIENT INTERVAL	CL .39903 .48078 .57061	GRADIENT INTERVAL	CL .39952 .49701 .59031	GRADIENT INTERVAL	CL .39915 .50907 .60571	
38	1/24/1			3.39 GRA	.03761 .14223 .11115	3.38 GRA	38643 41237 31935 01366	3.37 GRAI	DY 34488 39669 41872 01637	3.36 GRA[0Y 51265 47228 46917 .00985	3.3£ GRA[0Y 41856 43596 48760 01485	
DATA - CA23B	14-120(CA23B		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	0X 12109 05354 05880	EN/L =	0x -,15476 -,02514 -,09557	RN/L =	0X 14715 01582 09065	RN/L =	DX 10253 08537 12801 00522	RN/L =	DX 11246 11112 22071 02280	
TABULATED SOURCE	ARC		= 1109. = 375.	. 101/0	ALPHAO 8.00852 10.24330 12.22970 1.02022	. 102/ 0	ALPHAO 7.96112 10.27510 12.36190	. 103/ 0	ALPHAO 7.98002 10.27820 12.36480 .95906	0 /401 .	ALPHAO 8.00410 10.33170 12.36740 .96574	. 105/ 0	ALPHAO 8.01493 10.39430 12.42070 .96903	
TABUL		REFERENCE DATA	YMRP ZMRP	RUN NO.	MACH . 59549 . 59593 . 59467	RUN NO	MACH . 59438 . 59797 . 59846	RUN NO	MACH . 59684 . 59644 . 59768	RUN NO	MACH .59714 .59646 .59578 00930	RUN NO	MACH .59615 .59623 .59500 00024	
4R 76		REFEREN	2690.0000 SQ 474.8100 IN 936.6800 IN		ALPHAC . 132 2.303 4.270 GRADIENT		ALPHAC 206 2.335 4.346 GRADIENT		ALPHAC 178 2.357 4.381 GRADIENT		ALPHAC 108 2.360 4.407 GRADIENT		ALPHAC 111 2.422 4.429 GRADIENT	
UAIL 22 MAR			SREF = 6 LREF = 8 BREF = 8 SCALE =		02 6.742 7.349 7.463		02 10.009 10.088 10.447		02 15.028 14.812 15.043		02 29.734 30.254 29.860		DZ 44,868 45,183 45,129	

149	75)		5.000 5.000 .000		CBL 00117 00062 00072	1 22 1		-1.000 5.000 .000		CBL 00071 00055 00069		CBL 00068 00082 00084 00004		CBL -,00081 -,00080 -,00095
PAGE	(08 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN .00068 .00009 00050) (08 oct	DATA	STAB # ELEVON # DX # MACH #		CYN .00103 .00111 .00092		CYN .00119 .00106 .00114		CYN .00122 .00115 .00103
	CONHO 10	PARAMETRIC (0000.		CY .00156 .00371 .00392	CONHOLI	PARAME TRIC	0000		CY .00273 .00305 .00262		CY .00284 .00290 .00368		CY .00327 .00317 .00324 00001
		u.	BETA RRUDDER RIORB R	00.5 /0	CLM .01455 .02014 .02383		_	BETA RUDDER IORB DY	0/ 5.00	CLM . 01139 . 01752 . 02486 . 00319	00/ 5.00	CLM .00826 .01520 .02238	.00/ 5.00	CLM .00697 .01381 .02198
	ITER DATA)			AL = -5.00,	CD .08915 .11388 .14839	(ORBITER DATA)			/AL = -5,00.	CD .06131 .06651 .07512 .00326	AL = -5.	CD . 06224 . 06797 . 07603	# ₽	CD .06261 .06862 .07706
	1 02S1 (ORBITER			GRADIENT INTERVAL	CL .39865 .50677 .61095	0251			GRADIENT INTERVAL	CL .18355 .24220 .30306	GRADIENT INTERV	CL . 19545 . 25253 . 30360	GRADIENT INTERVAL	CL . 19573 . 25535 . 31451 . 02611
æ	1 747/1 ATI			.34	0Y -,42559 -,50454 -,54820 -,02749	3) 747/1 ATI			3.34 GRA	07 18456 22048 22023 00861	3.35 GRA	DY 12903 22900 20347	3.35 GRA	DY 18607 22556 22926 00973
DATA - CA238	14-120(CA23B		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L = 3	0X 00328 01726 14625 03050	14-120(CA23B)		00000 IN. XO 00000 IN. YO 00000 IN. ZO	RN/L *	DX 08958 06761 08397	RN/L *	DX 20703 .12007 04267	RN/L =	DX 16821 .09256 01048
TABULATED SOURCE	ARC 1		1109.00 00 - 375.00	. 106/ 0	ALPHA0 8.06252 10.42250 12.40590	ARC		= 1109. = 375.	. 1117 0	ALPHA0 4.01104 6.13462 8.21539	. 112/0	ALPHA0 4.03841 6.25137 8.17837	113/0	ALPHA0 4.05269 6.23779 8.30710
TABULA		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .59354 .59459 .59433 .00019		E DATA	FT. XMRP YMRP ZMRP	RUN NO	MACH .59320 .59295 .59212	RUN NO	MACH .59381 .59203 .59299	RUN NO	MACH .59267 .59142 .59138
IR 76		REFERENCE DATA	2690.0000 SQ.F1 474.8100 IN. 936.6800 IN.		ALPHAC 076 2.472 4.415 GRADIENT		REFERENCE DATA	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN. .0125		ALPHAC .047 2.270 4.264 GRADIENT		ALPHAC 170 2.385 4.257 GRADIENT		AL PHAC - 120 2 353 4 4 19 GRAD : ENT
DATE 22 MAR			SREF = 2 LREF = BREF = SCALE =		50.418 50.480 50.480 50.477			SREF = 6 LREF = BREF = SCALE =		02 3.151 3.118 3.528		547 7.547 7.199 7.175		02.781 9.781 9.781 9.491

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	_		5000		991 081 097		106 098 117 302		100 110 102	_		0000		362 369 370
PAGE 150	OCT 75		5.000		CBL 00091 00081 00097 00001		CBL 00106 00098 00117 00002		CBL 00100 00092 00110	OCT 75		5.000		CBL 00062 00069
ď	80)		STAB = ELEVON = DX =		CYN .00131 .00129 .00107	-	CYN . 00120 . 00101 . 00104		CYN .00107 .00101 .00096	80) (DATA	STAB = ELEVON = DX = MACH =		. 00120 . 00104 . 00075
	(CNH011)	PARAMETR 1	0000.		CY .00357 .00340 .00318 00009	-	CY .00283 .00218 .00315		CY .00215 .00213 .00279	(CNHO18	PARAMETRIC	. 000 . 000 6. 000	•	. 00433 . 00410 . 00440
	2		BETA RUDDER RIORB R	00/ 5.00	CLM .00529 .01263 .02140	00/ 5.00	CLM .00217 .01051 .01999	00/ 5.00	CLM .00065 .00925 .01858			BETA = RUDDER = 10RB = DY	.00/ 5.00	CLM .01664 .02634 .03311
	(ORBITER DATA)			5.	CD . 06411 . 07015 . 07916 . 00336	L = -5.	CD .06522 .07318 .08319	۳ - 5.	CD .06665 .07483 .08620	(ORBITER DATA)			£,	CD . 06961 . 07925 . 09481
	AT1 0251			GRADIENT INTERVAL	CL .20029 .26277 .32567 .02817	GRADIENT INTERVAL	CL . 19487 . 27269 . 34705 . 03284	GRADIENT INTERVAL	CL . 19449 . 28463 . 36513	ATI 0251 (0			GRADIENT INTERVAL	CL . 29210 . 34938 . 41676
CA238	38) 747/1		0.00	3.35 6	07 19547 23114 18094	3.35 GA	DY 17462 23873 21969 01050	3.34 GR	DY 24970 27150 18981	747/1			3.35 GR	0Y 28949 32941 00637
DATA -	14-120(CA238)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	DX 12322 01929 17291	RN/L ≠	DX 12413 14288 12964 00149	RN/L *	DX 06309 22253 10643	14-120(CA238)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L *	06803 06803 08407 00334
TABULATED SOURCE	ARC		# 1109.	114/ 0	ALPHAO 4.15214 6.3274; 8.34322 94304	115/0	ALPHAO 4.00406 6.32040 8.35864 .94143	116/ 0	ALPHAO 4.02465 6.29147 8.35115 .94287	ARC		375.	121/0	ALPHA0 5.99659 8.26383 10.27320
TABUL		SE DATA	. FT. XMRP YMRP ZMRP	RUN NO.	MACH . 59347 . 59386 . 59566 . 00048	RUN NO.	MACH . 59500 . 59479 . 59391	RUN NO.	MACH . 59320 . 59320 . 59252		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .59480 .59631 .59450 00004
MAR 76		REFERENCE DATA	2690.0000 SQ.F. 474.8100 IN. 936.6800 IN.		ALPHAC -, 041 2.414 4.392 GRADIENT		ALPHAC -, 177 2, 432 4, 435 GRADIENT		ALPHAC -, 134 2, 347 4, 450 GRADIENT		REFERENCE DATA	2690.0000 SQ.FT 474.8100 IN. 938.6800 IN.		ALPHAC .038 2.411 4.319 GRAD:ENT
DATE 22 MAR			SREF # LREF # BREF # SCALE #		D2 14.874 14.967 14.963		DZ 29.907 29.803 29.693		DZ 44.786 45.057 44.452			SREF # LREF # BREF # SCALE #		DZ 3.209 3.176 3.398

151	. 75)		5.000 5.000 .600		CBL 00082 00102 00112	•	CBL 00109 00104 00116	T 75)		5.000 .000 .000 .600		CBL -,00043 -,00040 -,00047 -,00001		CBL 00044 00058 00055 00003
PAGE) (08 OCT	DATA	STAB # ELEVON # DX # MACH #		CYN . 00123 . 00085 00008		CYN . 00121 . 00113 . 00063	S) (08 OCT	DATA	STAB FELEVON BOX MACH FE		.00101 .00108 .00077 00006		.00108 .00104 .00075
	(CNH012)	PARAMETRIC	000 . 000 . 000 . 000		. 00402 . 00482 . 00475		. 000419 . 000419 . 000429	(CNH013)	PARAMETRIC	000. 0000. 0000.		.00195 .00302 .00255 .00014		.00197 .00244 .00225
		_	BETA = RUDDER = 10RB = DY	00/ 5.00	CLM .01434 .02393 .03053	0/ 5.00	CLM .01271 .02265 .02971 .00369			BETA = RUDDER = 10RB = DY	0/ 5.00	CLM .01782 .02619 .03339	.007 5.00	CLM .01398 .02363 .03051
	(ORBITER DATA)			ı, Çi	. 07102 . 08137 . 09717 . 00580	/AL = -5.00,	. 07119 . 08155 . 09921 . 00598	(ORBITER DATA)			VAL = -5.00,	CD . 07136 . 08007 . 09640		CD .07180 .08178 .09774 .00569
	0251			GRADIENT INTERVAL	CL .30505 .36180 .42709	GRADIENT INTERVAL	CL .30080 .35950 .43751 .02930	AT1 0251 (OR			GRADIENT INTERVAL	CL .29869 .34994 .42077	GRADIENT INTERVAL	CL .29924 .35760 .42833 .02843
æ	1) 747/1 AT1			3.34 GRAD	DY 26645 30365 41296 03222	3.34 GRA	DY 29121 32093 0606	747/1			3.34 GRA	07 54464 49183 57379 00681	3.34 GRA	DY - 42273 - 50229 - 51025
DATA - CA23B	14-120(CA23B)		1,0000 IN. X0 .0000 IN. Y0 5,0000 IN. Z0	RN/L = 3	0x 20573 04076 07958	FN/L = 3	DX 19455 .02098 10402	14-120(CA23B)		0000 IN. XO	RN/L =	DX 01073 05380 06887 01383	RN/L =	DX 15708 .04116 06766
SOURCE	ARC 1		1109.00 2 .00 375.00	122/ 0	ALPHAO 6.16280 8.34562 10.37730	123/ 0	ALPHAO 6.05873 8.34630 10.42810	ARC		1109.	. 131/0	ALPHAD 6.06234 8.09604 10.28890	. 132/ 0	AL PHAO 6.01524 8.25183 10.29700
TABULATED		E DATA	FT. XMRP YMRP . ZMRP	RUN NO.	MACH .59403 .59281 .59334	RUN NO.	MACH . 59296 . 59362 . 59257		E DATA	FT. XMRP YMRP ZMRP	RUN NO	MACH .59355 .59495 .59342	RUN NO	масн . 59173 . 59269 . 59204 . 00008
R 76		REFERENCE DATA	2690.0000 SQ.I 474.8100 IN. 936.6800 IN.		ALPHAC 026 2.399 4.448 GRADIENT		AL PHAC 156 2 . 439 4 . 458 GRAD I ENT		REFERENCE DATA	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN. 0125		AL PHAC . 127 2 . 255 4 . 338 GRAD I ENT		ALPHAC 139 2.360 4.367 GRAD:ENT
DATE 22 MAR			SREF = 2 LREF = BREF = SCALE =		02 7.586 7.752 7.261		DZ 10.180 9.988 10.110			SREF # CLREF # SPEF # SCALE #		52 3.093 3.006 3.460		02 7.217 7.234 7.262

TABULATED SOURCE DATA - CA23B

)E 152	175 J		5.000 5.000 .000 .600		CBL 00050 03070 00072		CBL 00067 00073 00089		CBL 00100 00096 00098		CBL -,00067 -,00090 -,00076		CBL000640006400053
PAGE	3) (0B OCT	DATA	STAB ELEVON BOX		CYN .00123 .00091 .00073		CYN . 00103 . 00090 . 00058 00009		CYN .00099 .00083 .00063		CYN .00096 .00083 .00044	•	CYN .00097 .00087 .00046
	(CNH013)	PARAME TR1C	000.		CY . 00244 . 00186 . 00261		CY .00194 .00187 .00233		CY .00205 .00195 .00331		CY .00123 .00153 .00227		CY .00127 .00143 .00239
			BETA ** RUDDER ** 10RB ** DY	0/ 5.00	CLM .01266 .02314 .02966	00/ 5.00	CLM .01157 .02146 .02823	0/ 5.00	CLM .00999 .01984 .02574	00/ 5.00	CLM .00898 .01851 .02404	2/ 5.00	7000
	(ORBITER DATA)			VAL = -5.00/	CD . 07209 . 08236 . 09849 . 00563	. = -5.	CD .07274 .08364 .10085	/AL = -5.00/	CD . 07456 . 08638 . 10440	* .5.	CD .07513 .08733 .10755	/AL = -5.00/	CD .07585 .08893 .10877
	AT1 0251 (OR			GRADIENT INTERVAL	CL . 29924 . 36120 . 43175 . 02846	GRADIENT INTERVAL	CL .29907 .36298 .43963 .03008	GRADIENT INTERVAL	CL .30273 .37641 .45628 .03424	GRADIENT INTERVAL	CL . 29870 . 37968 . 46929 . 03752	GRADIENT INTERVAL	CL .29697 .38359 .47523
CA23B	747/1			3.33 GRA	DY -,45642 -,58665 -,58819 -,02975	3.35 GRA	0Y -,48842 -,50023 -,53208 -,00920	3.35 GRA	DY -,48303 -,52953 -,48783 -,00187	3.35 GRA	07 55682 52600 55187	3.35 GRA[DY 50309 52458 56778 01410
E DATA - CAR	14-120 (CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L ≈	DX 21796 .00486 10588	£N/L =	DX 14580 10008 06533 02092	RN/L =	DX 13999 .02612 12102	RN/L =	0x 03050 .06383 13420 02059	RN/L =	0x .02680 22483 15954 04344
ABULATED SOUNCE	ARC		= 1109. = 375.	. 133/ 0	ALPHAO 5.97668 8.30916 10.31750	. 1347 0	ALPHAO 6.02236 8.30132 10.40650	. 135/ 0	ALPHAO 6.12957 8.34504 10.35230	. 136/ 0	ALPHAO 6.08505 8.32281 10.41210	. 137/ 0	ALPHAO 6.08766 8.35052 10.39360
ABQ.		REFERENCE .DATA	FT. XMRP	RUN NO	MACH . 59189 . 59154 . 59196	RUN NO	MACH .59168 .59073 .59089	RUN NO.	MACH .59060 .59017 .59049	RUN NO	MACH . 59048 . 59053 . 59092	RUN NO	MACH .59060 .59151 .59112
0		REFEREN	2690.0000 SQ 474.8100 IN 936.6800 IN		ALPHAC 237 2.407 4.371 GRADIENT		AL PHAC 191 2.411 4.441 GRADIENT		ALPHAC 063 2.435 4.393 GRADIENT		ALPHAC 049 2.450 4.474 GRADIENT		ALPHAC 057 2.433 4.464 GRADIENT
מיר בב יושר			SREF = 6 LREF = 6 BREF = SCALE =		02 10.116 9.960 9.890		02 15.175 14.756 15.038		02 30.192 29.830 29.948		20 44, 708 44, 652 44, 663		DZ 50.164 50.275 50.038

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153	15 1		5.000 5.000 10.000		CBL 00021 00044 00012		CBL 00049 00054 00002		CBL 00063 00057 .00003		CBL 00051 00073 00009		CBL 00082 00099 00007		CBL 00071 00079 00003
PAGE	1 09 001	DATA	STAB = ELEVON = DX = MACH = I		. 00117 . 00091 00013				CYN .00097 .00080 00007		. 00101 . 00075 00011		2YN .00092 .00053 		. 00102 . 00038 00026
	(CNHO1+)	PARAMETRIC	000.9		.00205 .00184 .0011		CY .00212 .00201 00004		. 00108 . 00145 . 00015		.00130 .00173 .00173		. 00126 . 00143 . 00007		. 90140 . 00114 00011
		_	BETA RUDDER RIORB R	/ 5.00	. 02242 . 02775 . 0274	/ 5.00	CLM .01997 .02518	/ 5.00	CLM .01872 .02447 .00234	7 5.00	CLM .01753 .02328 .00239	1/ 5.00	CLM .01637 .02239 .00251	00.5 /	CLM .01541 .02161 .00255
	(ORBITER DATA)			AL = -5.00/	. 08094 . 09541 . 00743	AL = -5.00/	CD . 08128 . 09642 . 00640	'AL = -5.00/	CD . 08197 . 09808 . 00656	/AL = -5.00/	CD . 08296 . 09987 . 90702	/AL = -5.00,	CD . 08552 . 10431 . 00785	VAL = -5.00/	CD .08629 .10792
	0251			GRADIENT INTERVAL	CL . 35035 . 40963 . 03046	GRADIENT INTERVAL	CL .35830 .41837 .02537	GRADIENT INTERVAL	CL .35981 .42415 .02619	GRADIENT INTERVAL	CL .36106 .43154 .02927	GRADIENT INTERVAL	CL .37372 .45572 .03424	GRADIENT INTERVAL	CL .37508 .47522 .04117
CA23B	3) 747/1 AT1			3.33 GRAD	.61049 62378 00683	3.32 GRAD	0Y 57642 56853 00333	3.32 GRAE	DY 65521 61097 .01800	3.31 GRA	DY 56380 67370 04564	3.31 GRA	07 54460 67261 05345	3.30 GRA	07 59050 62597 01458
ı	14-120(CA23B)		000 IN. XO 000 IN. YO 000 IN. ZO	RN/L ≠	03.83387 9.90698 9.30698	RN/L =	0x 9.83965 9.98195 .06010	RN/L ≠	DX 9.80002 9.94826 9.06033	RN/L =	DX 9.88695 9.98489 0.4068	RN/L ≠	0x 9.83759 9.90959 03006.	RN/L =	0x 9.89672 9.89048
TABULATED SOURCE DATA	ARC		1109.0000 0000 - 375.0000	141/0	ALPHA0 8.14864 10.18740 1.04754	142/ 0	ALPHA0 8.03902 10.18070	143/0	ALPHA0 B. 07874 10.29950	144/0	ALPHA0 8.07216 10.27839	. 145/ 0	ALPHA0 8.10933 10.31920	. 146/0	ALPHA0 B.09096 10.36500
TABULA		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	.58874 .58797 .00040	RUN NO.	MACH . 59106 . 59023 00035	RUN NO	МАСН . 58948 . 58978 . 00012	RUN NO	MACH .58834 .58834	RUN NO	MACH .58824 .59120 .00124	RUN NO	MACH .59220 .59175 00019
MAR 75		REFERENCE DATA	2690,0000 SQ.FT 474,8100 IN. 936,6800 IN.		ALPHAC 2.292 4.239 GRADIENT		ALPHAC 1.933 4.300 GRADIENT		ALPHAC 1.946 4.403 GRADIENT		ALPHAC 1.968 4.376 GRADIENT		ALFRAC 1,997 9,708 6875 ENT		ALPHAC 1.998 4.430 GRAD:ENT
DATE 22 M			SREF = CREF = SCALE = SCALE = CREF =		02 3.324 3.528		DZ 7.340 7.097		02 10.137 9.825		02 14.831 14.775		DZ 30.007 29.873		02 ተያፀ. ዛት ተ89. ዓት

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CBL -.00049 -.00016 CBL -.000**54** -.00043 CBL -.00075 -.00024 .00021 CBL -.00076 -.00023 CBL -. 04968 -. 06060 -. 00003 5.000 .000 .000 .000 5.000 ŭ 5 75 PAGE C 08 OCT 08 OCT . CYN . 00069 . . 00010 CYN .00066 .00001 CYN .00071 -.00012 -.00034 CYN .00038 ~.00038 ~.00031 CYN .00051 -.00037 STAB ELE VON DX MACH STAB ELEVON DX MACH PARAMETRIC DATA PARAMETRIC DATA (CNH015) (CNH014) CY .00322 .00498 -.00014 .00127 CY .00279 .00483 .00105 CY .00282 .00451 .00070 CY .00310 .000459 .000 .000 .000 .000 CLM .02076 .02493 .00170 CLM .01580 .02132 .00232 CLM .02450 .02917 .00239 CLM .02354 .02845 .00202 CLM .02243 .02707 .00192 BETA RUDDER 1 10RB 1 BETA RUDDER : JORB : 5.00 5.00 5.00 5.00 5.00 GRADIENT INTERVAL = -5.00/ GRADIENT INTERVAL = -5.00/ -5.00/ GRADIENT INTERVAL = -5.007 GRADIENT INTERVAL = -5.00/ ARC 14-120(CA23B) 747/1 ATI 02SI (0RBITER DATA) ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA) CD .10364 .12866 .01282 CD . 10874 . 14258 . 01385 CD .08763 .10773 .00844 CD . 10320 . 13246 . 01206 CD .10483 .13512 GRADIENT INTERVAL CL . 46732 . 54361 . 03909 CL .47149 .55680 .03518 CL .38305 .47280 .03768 CL .47632 .56613 .03715 CL . 49289 . 59235 . 04069 .58366 -.63135 -.02002 -.64955 -.65076 -.00062 -.69514 -.62920 -.02719 DY -.73897 -.69922 .01644 3.29 3.29 3.29 3.30 222 222 DX 9.92864 9.93609 .00313 DX 9.87396 9.88592 DX 9.84214 9.88451 .01747 DX 9.83145 9.90355 .02983 DX 9.85376 9.88809 .01404 375.0000 IN. 3 1109.0000 IN. .0000 IN. 375.0000 IN. RN/L RN/L = ₹N/L = RN/L = RN/L ALPHAO 8.14847 10.35190 ALPHAO 10.27640 12.32900 1.05174 ALPHAO 10.12980 12.42930 .94813 ALPHAO 10.16290 12.41680 .93236 ALPHA0 10.16660 12.45850 .93764 147/ 0 151/0 152/ 0 153/ 0 154/0 RUN NO. RUN NO. PUN NO. RUN NO. XMRP YMRP ZMRP XMRP YMRP ZMRP SON NO МАСН .58930 .59112 MACH .58834 .59019 .00076 MACH .59016 .59062 .00019 MACH .59012 .58935 .00039 масн . 58898 . 58898 . 00000 REFERENCE DATA REFERENCE DATA 2690,0000 SQ.FT. 474,8100 IN. 936,6800 IN. 50.FT. ALPHAC 2.049 4.431 GRADIENT ALPHAC 2.410 4.362 GRADIENT ALPHAC 2.043 4.469 GRADIENT ALPHAC 2.079 4.497 GRADIENT ALPHAC 2.049 4.493 GRADIENT 2690.0000 474.8100 936.6800 DATE 22 MAR 76 02 50.387 50.182 02 7.261 7.540 02 9.896 10.215 DZ 14.806 14.750 DZ 30.131 30.087 SREF LEREF BREF SCALE SREF LREF BREF SCALE

155	1 75)		5.000 5.000 10.000		CBL 000335 00024		CBL 00067 00016 .00022	1 75 1		5.000 5.000 20.000		CBL 00039 00055 00009		CBL 00066 00080		CBL 00072 00082 00004
PAGE	00 80) (DATA	STAB = ELEVON = DX # MACH =		. 00020 - 00025 - 00019		CYN .00025 00045 00029	(08 OCT	DATA	STAB # ELEVON # DX # MACH #		CYN .00108 .00089		CYN .00121 .00096 00010		. 00105 . 00085 00008
	COMPOIS	PARAMETRIC	000 000 000 000 000 000		. 00244 . 00449 . 00085		CY .00273 .00354 .00035	(CNHO16	PARAMETR1C	0000.		CY .00288 .00320 .00017		. 00338 . 00365 . 00011		. 00277 . 00346 . 00028
			BETA RUDOER 10RB EV.	0/ 5.00	CLM .01962 .02362 .00166	0/ 5.00	CLM .01936 .02314 .00160			BETA = RUDDER = 10RB = DY	0/ 5.00	CLM .01793 .02208 .00221	00/ 5.00	CLM .01503 .01946 .00180	00/ 5.00	CLM .01420 .01867
	(ORBITER DATA)			/AL = -5.00/	CD .10874 .14565	/AL = -5.00/	. 10914 . 10914 . 14524 . 01530	(ORBITER DATA)			-5.0	CD . 08452 . 09864 . 00752	"	CD . 08383 . 10007 . 00661	L = -5.	CD .08427 .10027 .00641
CA238	0251			GRADIENT INTERVAL	CL . 49116 . 60459 . 04696	GRADIENT INTERVAL	CL . 494 14 . 60587 . 04736	0251			GRADIENT INTERVAL	CL .35256 .41163 .03145	GRADIENT INTERVAL	CL .35885 .42292 .02606	GRADIENT INTERVAL	CL .36144 .42304 .02468
	11 747/1 ATI			3.29 GRAD	07 70105 69118 .00409	3.29 GRAD	0Y 71722 65667 .02566	3) 747/1 ATI			3.29 GRA	0Y 85192 73584 96180	3.28 GRA	0Y 81205 80660 .00222	3.31 GRA	DY 76563 81234 01871
DATA -	14-120(CA23B)		000 IN. XO 000 IN. YO 000 IN. ZO	RN/L =	0x 9.84286 9.80066 01747	RN/L =	0x 9.95743 9.90189 -,02354	14-120(CA 23B)		9.0000 IN. XO .0000 IN. YO 5.0000 IN. ZO	RN/L *	0X 19.88670 19.94590 53152	RN/L =	0x 19.88560 19.98590	RN/L =	0x 19.81960 20.00000 .07228
TED SOURCE	ARC		1109.0000 2.0000 375.0000	155/ 0	ALPHAO 10.11530 12.43770 .96142	156/ 0	ALPHAO 10.08650 12.34030 .95528	ARC		= 1109. = 375.	. 151/0	ALPHA0 8.27532 10.26730 1.06004	. 162/ 0	ALPHA0 8.10145 10.36010	. 163/ 0	ALPHA0 8.13025 10.34260 .88639
TABULATED		: DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH .58992 .58952 00016	RUN NO.	MACH .58875 .58946 .00030		E DATA	FT. XMRP YMRP ZMRP	RUN NO	MACH .56993 .59018	RUN NO	MACH .58931 .58955 .00010	RUN NO	MACH . 59022 . 58900 00049
MAR 76		REFERENCE DATA	2690.0000 SQ.F. 474.8100 IN. 936.6800 IN.		ALPHAC 2.044 4.460 GRADIENT		ALPHAC 2.016 4.375 GRADIENT		REFERENCE DATA	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN. .0125		ALPHAC 2.461 4.340 GRADIENT		ALPHAC 2.024 4.482 GRADIENT		ALPHAC 1.989 4.485 GRADIENT
DATE 22 M			SREF = ; LREF = BREF = SCALE =		DZ +4.833 +5.102		0 2 50.292 50.425			SREF = LREF = BREF = SCALE =		02 2.997 3.241		7.114 7.114 7.110		02 10.110 9.502

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E 156	1 75)		5.000 5.000 50.000		CBL 000B1 00102 00010		CBL -,00112 -,00092		CBL 00089 00108 00007		CBL 00085 00097 00005
PAGE	6) (08 OCT 75	DATA	STAB E ELEVON # DX MACH #		CYN .00101 .00072 00014		CYN .00094 .00061		CYN .00087 .00047 00016		CYN .00092 .00042
	(CNH016)	PARAMETRIC DATA	6.000 6.000		CY .00291 .00347 .00026		CY .00286 .00278 00003		CY .00215 .00306 .00037		CY .00217 .00324 .00043
			BETA = RUDDER = 10RB = DY	0/ 5.00	CLM .01408 .01823	00.5 /(CLM .01379 .01904 .00216	0/ 5.00	CLM .01384 .01946 .00231	00.5 /0	CLM .01368 .01948 .00233
	BITER DATA)			/AL * -5.00/	CD . 08553 . 10025 . 00685	/AL = -5.00/	CD . 08589 . 10496 . 00783	/AL = -5.00/	CD .08659 .10736 .00852	/AL = -5.00/	CD . 08697 . 10909 . 00887
	747/1 AT1 0251 (ORBITER DATA)			GRADIENT INTERVAL	CL .36955 .42908 .02771	GRADIENT INTERVAL	CL .37392 .45395 .03285	GRADIENT INTERVAL	CL .37675 .46952 .03804	GRADIENT INTERVAL	CL .37603 .47511 .03970
38				3.30 GRA	07 82928 74015 .04148	3.31 GRA	DY 80714 96086 02205	3.30 GRA	DY -,75225 -,77199 -,00810	3.30 GRA	DY 80823 77122 .01483
TABULATED SOURCE DATA - CA238	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	0x 19,89530 20,01710 .05669	RN/L =	02 19.88350 19.95900 13099	RN/L =	DX 19.87420 19.88250 .00340	RN/L =	0x 19.98550 19.90790 03110
ATED SOURCE	ARC		# 1109. # 375.	. 164/ 0	ALPHAO 8.26269 10.20060	. 165/ 0	ALPHAO 8.11890 10.34740	0 /991 .	ALPHAO 8.08105 10.34770 .92940	. 167/ 0	ALPHAO 8.06786 10.43010 .94658
TABUL		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .58950 .58971 .00010	RUN NO.	МАСН 59006 . 59030 . 00010	RUN NO.	MACH .58963 .58976 .00005	RUN NO.	MACH . 58890 . 58866
AR 76		REFERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		AL PHAC 2.147 4.296 GRADIENT		AL PHAC 2.006 4.442 GRADIENT		AL PHAC 2.001 4.440 GRADIENT		AL PHAC 1.983 4.478 GRADIENT
DATE 22 MAR 76			SREF = LREF = BREF = SCALE =		02 14.885 14.669		02 29.970 29.738		07 44.740 44.620		02 50.218 50.509

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157	r 75)		5.000 5.000 20.000 .600		CBL 00031 00038		CBL -, 00084 -, 00057 .00011		CBL -,00120 -,00066		CBL 00101 00079 .00009	
PAGE) (08 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN .00062 00011 00035		CYN .00067 00021 00037		CYN .00055 00027		CYN .00050 00041 00038	
	(CNH017)	PARAMETRIC	0000.8		. 00380 . 00590 . 00101		CY .00544 .0058		ር ሃ . 00564 ታ300 . ታ3000 .		CY .00438 .00624 .00077	
		_	BETA R RUDDER R 10RB R DY R	5.00	CLM .02117 .02461 .00165	5.00	CLM . 02029 . 02350 . 00135	7 5.00	CLM .01925 .02242	7 5.00	CLM .01832 .02203 .00154	7 5.00
	ITER DATA)		BE-C	/AL = -5.00/	.10417 .12999 .01236	/AL = -5.00/	.10444 .13000 .01075	/AL = -5.00/	.10518 .13200	VAL = -5.00/	CD .10731 .13886 .01313	VAL = -5.00/
	747/1 ATI 02SI (ORBITER DATA)			GRADIENT INTERVAL	CL .46268 .54214 .03805	GRADIENT INTERVAL	CL .46954 .54341 .03107	GRADIENT INTERVAL	CL .47141 .55127 .03401	GRADIENT INTERVAL	CL .48149 .57931 .04071	GRADIENT INTERVAL
38				3.31 GRA	DY 73949 88774 07099	3.32 GRA	07 83323 80872	3.33 GRA	07 83951 82679 .00542	3.32 GRA	75 87986 75313 5575	3.32 GRA
RCE DATA - CA23B	RC 14-120(CA23B)		000 IN. XO 000 IN. YO 000 IN. ZO	PR/L =	0x 19.85050 19.85190 . 00067	RN/L #	DX 19.86550 19.96400	RN/L =	XC 19.87800 19.95010	RN/L =	DX 19.85060 19.90240 .02156	RN/L =
TABULATED SOURCE	ARC		= 1109.0000 = 00000 = 375.0000	0 /1/1	ALPHA0 10.20990 12.38070 1.03942	. 172/ 0	ALPHA0 10.12200 12.28790	. 173/ 0	ALPHA0 10.15750 12.31590	. 174/ 0	ALPHA0 10.12010 12.32620	0 /5/10
TABULA		DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH . 59052 . 58988 - , 00031	RUN NO.	MACH .59146 .59089 00024	RUN NO.	MACH .59126 .59227 .00043	RUN NO.	MACH . 59111 . 59085	RUN NO.
R 76		REFERENCE DATA	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN. .0125		ALPHAC 2.320 4.409 GRADIENT		ALPHAC 1.989 4.367 GRADIENT		ALPHAC 2.042 4.390 GRADIENT		ALPHAC 1.994 4.397 GRADIENT	
DATE 22 MAR 76			SREF = 2 LREF = BREF = 5CALE =		02 7.409 7.682		02 10.200 9.876		02 14.980 14.840		DZ 30.168 29.810	

CBL -.00089 -.00074 .00006

CYN .00028 -.00040

CY .00362 .00529 .00075

CLM .01816 .02146 .00148

CD .10974 .14366 .01518

CL .49087 .59769 .04782

DY -.87380 -.81367 -.02692

DX 19.95560 19.88730 -.03057

ALPHA0 10.19050 12.33830 .96146

MACH .59046 .59133 .00039

ALPHAC 2.118 4.352 GRAD:ENT

50.344 50.595

CBL -.00098 -.00087

CYN .00012 -.00043

CY .00332 .00516 .00080

CLM .01842 .02183 .00148

CD . 10942 . 14446 . 01519

CL .49282 .59969 .04631

DY -.82726 -.77838 .02118

DX 19.84610 19.77770 -.02964

ALPHA0 10.18690 12.41310

MACH .59147 .59090 -.00025

ALPHAC 2.109 4.417 GRADIENT

DZ 44.854 45.244

5.00

3.32 GRADIENT INTERVAL = -5.00/

RN/L =

176/0

RUN NO.

(CNH018) (08 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

	5.000 5.000 .000 .600		CBL 00391 00654 00136		CBL 00296 00523 00096		CBL 00297 00478 00073		CBL 00286 00394 00048		CBL 00211 00276 00029		CBL 00164 00197 00014
DATA	STAB = ELEVON = DX = MACH =		CYN 00040 00099		CYN 00013 00067		CYN .00007 00075		CYN .00022 00043		CYN .00055 00006		CYN .00069 .00012
PARAMETRIC	.000 .000 6.000 10.000		CY .00301 .00146 00080	,	CY .00200 .00130		CY .00248 .00114 00054		CY .00229 .00119		CY .00214 .00169 00020		CY .00198 .00217
	BETA = RUDDER = 10RB = DY	0/ 5.00	CLM . 02639 . 03430 . 00409	00/ 5.00	CLM . 02261 . 03028	0/ 5.00	CLM . 02174 . 02961 . 00319	1/ 5.00	CLM . 02085 . 02800 . 00316	1/ 5.00	CLM . 01815 . 02466 . 00291	/ 5.00	CLM .01643 .02290
		/AL = -5.00/	CD . 0 8162 . 09697 . 00794	5.	CD . 08232 . 09791 . 00658	AL = -5.00/	CO . 08245 . 10067 . 00738	AL = -5.00/	CD . 08407 . 10075	AL = -5.00/	CD .08607 .10471	AL = -5.00/	CD .08701 .10751 .00877
		GRADIENT INTERVAL	CL .36398 .42915 .03370	GRADIENT INTERVAL	CL .36982 .43373 .02740	GRADIENT INTERVAL	CL .36763 .44477 .03123	GRADIENT INTERVAL	CL .37273 .44470 .03183	GRADIENT INTERVAL	CL .37583 .45844 .03697	GRADIENT INTERVAL	CL .37850 .47175 .03992
		3.32 GRA	DY 9.62659 9.59622 01570	3.31 GRA	0Y 9.51655 9.62298 0.4492	3.31 GRA	0,57279 9,57279 9,48457 -,03572	3.33 GRAD	0Y 9.52500 9.52253 00109	3.33 GRAD	07 9.55144 9.58230 .31408	3.32 GRAD	0Y 9.51284 9.47621 01568
	0000 IN. YO 0000 IN. YO 0000 IN. ZO	RN/L =	DX -,12064 -,08127 .02036	RN/L =	DX 20008 01628 .07757	RN/L =	0x 17612 06798 .04378	RN/L =	19876 05627 .06303	RN/L =	DX 17495 11756 .02568	RN/L =	DX 07;76 08370 00254
	= 1109. = 375.	. 181/0	ALPHAO 8.33671 10.37400 1.05348	. 182/ 0	ALPHAO 8.13180 10.27110	. 183/ 0	ALPHAO 8.10379 10.41380	1847 0	ALPHAO 8.20417 10.27250	185/ 0	AL PHAO 8.16409 10.25280	186/ 0	ALPHAO 8.04435 10.24170
E DATA	.FT. XMRP YMRP ZMRP	RUN NO.	MACH . 59115 . 59201 . 00045	RUN NO	MACH .59096 .58954 00060	RUN NO	MACH .59142 .59168 .00011	RUN NO.	MACH .59109 .59144 .00016	RUN NO.	MACH .59179 .59187 .00004	RUN NO.	MACH . 59095 . 59177 . 00035
REFERENCE DAT	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN.		ALPHAC 2.472 4.405 GRADIENT		ALPHAC 2.009 4.378 GRADIENT		ALPHAC 2.005 4.475 GRADIENT		ALPHAC 2.102 4.362 GRADIENT		ALPHAC 2.100 4.335 GRAD;ENT		ALPHAC 1.972 4.308 GRAD:ENT
	SREF = BREF = SCALE =		DZ 3.378 3.590		DZ 7.711 7.202		9.911 10.102		D2 14.973 14.736		02 29.716 29.761		D2 44.733 44.856

159	15)		5.000 5.000 .600		CBL 00140 00175 00015	15)		5.000 .000 .600		CBL 00386 00549 00082		CBL 00336 00068		CBL 00253 00361 00044		CBL 00179 00207 00012
PAGE	(08 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN . .00074 .00006 00029) (08 OCT	DATA	STAB # ELEVON # DX # MACH #		CYN 00067 00104 00019		CYN 00047 00101 00024		CYN 00014 00082 00028		CYN .00005 00069
	(CNH018)	PARAMETRIC D	0000		CY .00216 .00012	(CNH019	PARAMETRIC 1			CY .00282 .00162 00061		. 00311 . 00220 00042		CY .00243 .0030C .00023		CY .00264 .00235 00012
		_	BETA = RUDDER = 10RB = DY	00/ 2.00	CLM .01579 .02249 .00282			BETA = RUDDER = 10RB = 0Y	00/ 2.00	CLM .02815 .03356 .00274	00/ 5.00	CLM .02671 .03195 .00239	00/ 5.00	CLM .02448 .03050 .00246	00/ 5.00	CLM .02239 .02730
	(ORBITER DATA)			ii R	. 08749 . 10931 . 00919	(ORBITER DATA)			5.	. 10492 . 13297 . 01420	RVAL = -5.0	CD . 10452 . 13127 . 01219	.5	CD .10407 .13585 .01297	L * -5.	CD .10757 .14262 .01467
	0251			GRADIENT INTERVAL	CL .37761 .47963 .04296	AT1 0251 (ORE			GRADIENT INTERVAL	CL .48240 .56503 .04183	ENT INTE	CL . 48415 . 55980 . 03448	GRADIENT INTERVAL	CL .47579 .57081	GRADIENT INTERVA	CL .48645 .59328 .04470
œ	1747/1 AT1			3.32 GRAD	07 9.55487 9.63862 03527	1/24/			3.32 GRAI	0Y 9.49085 9.47890 00605	3.32 GRADI	DY 9.42647 9.4345 3 0.0367	3.32 GRA	07 9.48663 9.47787 00358	3.32 GRA	DY 9.39762 9.41791 .00849
DATA - CA23B	14-120(CA23B)		0000 IN. X0 0000 IN. Y0 1000 IN. Z0	RN/L *	DX 05049 12212 03016	14-120(CA23B		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	0X 19122 09388 4929	RN/L =	DX 13626 04223 04286	RN/L *	0X 15746 07712	RN/L =	DX 19612 14130 .02294
TABULATED SOURCE	ARC		1109.00 1.00 1.00 1.00	187/ 0	ALPHAO 8.05519 10.34680	ARC		# 1109. # 375.	0 /161 .	ALPHAO 10.30160 12.38840 1.05655	. 1927 0	ALPHAO 10.17870 12.23590	0 /261 .	ALPHAO 10.05070 12.36710	0. 194/ 0	ALPHAO 10.12240 12.37380
TABULA		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH . 59027 . 59076 . 00020		E DATA	FT. XMRP YMRP ZMRP	RUN NO	MACH . 59105 . 59167 . 00031	RCN NO	MACH .59083 .59198 .00052	RUN NO	MACH .59227 .59154 00030	RUN NO	MACH . 59214 . 59179 00014
4R 76		REFERENCE DAT	2690.0000 SQ.F' 474.8100 IN. 935.6800 IN.		ALPHAC 2.021 4.396 GRADIENT		REFERENCE	2690.0000 SO.6 474.8100 IN. 936.6800 IN.		ALPHAC 2.405 4.380 GRADIENT		ALPHAC 2.115 4.310 GRADIENT		ALPHAC 1.964 1.414 GRADIENT		ALPHAC 2.014 4.404 GRADIENT
DATE 22 MAR			SREF # 6 LREF # BREF SCALE #		02 49.952 50.410			SREF * LREF * BREF * SCALE *		02 7.491 7.844	,	02 9.818 9.759		02 14.864 15.018		02 30.225 30.105

TABULATED SOURCE DATA - CA23B

ARC 14-120(CA23B)

PAGE 160

CBL -.00155 -.00155 CBL -.00113 -.00136 -.00010 5.000 5.000 .000 .600 08 OCT CYN .00008 -.00032 -.00017 .00016 .00054 -.00030 STAB ELEVON DX MACH PARAMETRIC DATA (CNH018) CY .00296 .00422 CY .00292 .00331 .00017 . 000 . 000 . 000 10. 000 CLM .02098 .02543 .00188 CLM .02050 .02454 .00169 BETA RUDDER : IORB : DY : 5.00 GRADIENT INTERVAL . -5.00/ 5.00 GRADIENT INTERVAL = -5.00/ 747/1 AT1 0251 (ORBITER DATA) CD .10806 .14609 CD .10901 .14522 .01560 CL .48929 .60659 .04957 CL .49297 .60466 .04811 9.45087 9.39875 -.02203 9.48992 9.32532 -.07090 3.34 3.34 = 1109.0000 IN. XO = .0000 IN. YO = 375.0000 IN. ZO DX -.16199 -.23329 -.03013 DX -.10008 -.12280 -.00978 RN/L = RN/L = ALPHAO 10.02770 12.36580 .98810 ALPHAO 10.05530 12.27740 195/0 196/0 RUN NO. RUN NO. XMRP YMRP ZMRP .59170 .59194 .00010 MACH .59172 .59165 REFERENCE DATA 2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN. AL PHAC 2.014 4.380 GRADIENT ALPHAC 2.002 4.323 GRADIENT D2 44.421 45.079 50.290 50.290 50.279 SREF LREF BREF SCALE

	5.000 .000. .600		CBL 00108 00125 00098		CBL0011900119000119
DATA	STAB = ELEVON = DX = MACH =		CYN . 00075 . 00079 . 00085		CYN .00074 .00084 .00082
PARAMETRIC DATA			CY .00287 .00322 .00359		CY .00249 .00338 .00396
	BETA = RUDDER = 10RB = 0Y	0/ 5.00	CLM .04604 .05121 .05845	0/ 5.00	CLM .04273 .04874 .05684
		/AL = -5.00/	CD . 05481 . 05592 . 06265 . 00186	/AL = -5.00/	CD .05530 .05808 .05335
		SRADIENT INTERVAL *	CL .11196 .16998 .22952	SRADIENT INTERVAL	CL .11644 .17558 .23487 .02595
		3.32 GRAI	07 23247 45838 24934 00523	3.32 GRAI	DY 45749 37696 36099
	0000 IN. YO 0000 IN. YO 0000 IN. ZO	RN/L =	0x -,04123 -,02004 -,10046	RN/L =	0X 11584 05714 06747
	1109.0000 1 .0000 1 375.0000	0 /0 .	ALPHAO 4.00251 6.08127 8.18834	0 /0	AL PHAO 3.96105 6.30038 8.19710 .93375
	FT. XMRP YMRP ZMRP	RUN NO.	MACH .58831 .58905 .58842	RUN NO.	MACH . \$8699 . \$8730 . 58692
	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		ALPHAC .056 2.231 4.258 GRADIENT		ALPHAC - 232 2.422 4.286 GRAD [ENT
	REF = 1		02 2.999 2.972 3.376		02 7.356 7.305 7.176

75

(21 OCT

(CNHO20)

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

REFERENCE DATA

SREF LREF BREF SCALE

161	. 27		5.000 .000 .600		CBL 00141 00142 00109		CBL 00155 00136 00116		CBL 00165 00146 00152		CBL 00147 00155 00145
PAGE	(21 OCT	DATA	STAB == ELEVON == DX == MACH ==		CYN .00091 .00096 .00096		CYN .00080 .00083 .00076		CYN .00073 .00062 .00062		CYN .00070 .00065 .00055
	(CNHO2D)	PARAMETRIC [0000.		CY .00354 .00391 .00405		CY .00310 .00323 .00330		CY .00269 .00302 .00302		CY .00222 .00234 .00278
			BETA * RUDDER * 10RB * DY	/ 5.00	CLM .04137 .04801 .05621	00.5 /	CLM .03985 .04647 .05566	00.5 /	CLM .03660 .04446 .05453	00'2'/0	CLM .03527 .04328 .05370
	TER DATA)			NL = -5.00/	CD .05584 .05862 .06440	AL = -5.00/	.05627 .05988 .05988 .06607	AL = -5.00/	CD .05774 .06231 .06963	AL = -5.00/	CD .05835 .06370 .07175
	747/1 ATI 0251 (ORBITER			GRADIENT INTERVAL	CL .11783 .18199 .23935 .02632	GRADIENT INTERVAL	CL .12129 .18745 .24878 .32824	GRADIENT INTERVAL	CL .11649 .19767 .26885 .03282	GRADIENT INTERVAL	CL .11609 .20582 .28382
m				3.32 GRAD	07 37733 30188 41242	3.31 GRAD	DY 37283 40100 38951 00381	.30	07 36988 40752 35652	3.30 GRAD	DY 36779 37945 47223
DATA - CA23B	14-120(CA23B)		00000 IN. XO 00000 IN. YO 00000 IN. ZO	RN/L = 3	DX 11365 05987 08454 .00698	RN/L = 3	DX 06537 05497 05492	RN/L = 3	0X 10009 11181 11226 00271	RN/L = 3	DX .33690 16221 08498
TABULATED SOURCE	ARC 1		1109.00 100.00 100.00	0 /0	AL PHAO 4.02219 6.27375 8.32394	0 /0	ALPHAO 4.08571 6.34658 8.32952	0 /0	ALPHAO 4.00738 6.31885 8.40410	0 /0	ALPHAO 4.0297; 6.37977 8.38738
TABULAT		DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH .58793 .58937 .59040	RUN NO.	MACH .58772 .58701 .58680 00021	RUN NO.	MACH . 58720 . 58738 . 58798 . 00016	PUN NO.	MACH . 58472 . 58704 . 58677 . 00647
IR 76		REFERENCE DATA	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN.		ALPHAC 190 2.393 4.416 GRADIENT		AL PHAC 076 2 . 433 4 . 425 GRADIENT		AL PHAC 150 2 . 421 4 . 475 GRAD IENT		AL PHAC 106 2.474 4.486 GRADIENT
DATE 22 MAR 76			SREF # 6 LREF # 6 BREF # 5 SCALE #		02 9.998 9.822 9.715		02 14.608 14.941 14.567		02 29.742 29.812 29.770		DZ 44,518 44,662 44,473

TABULATED SOURCE DATA - CA238

ARC 14-120(CA23B) 747/1 ATI 02SI (ORBITER DATA)

(CNH021) (08 OCT 75)

	-1.000 .000 .000 .600		CBL 00106 00112 00101		CBL 00131 00113 00117		CBL 00132 00122 00121		CBL 00163 00133 00116		CBL 00144 00158 00127
DATA	STAB # ELEVON # DX # MACH #		CYN .00081 .00087 00002		CYN .00091 .00082 .00072		CYN .00C79 .0C79 .0C60		CYN .00076 .00073 .00069		. 00071 . 00068 . 00065 00001
PARAME TRIC	0000.		CY .00321 .00382 .00348		CY .00371 .00332 .00335		. 00315 . 00352 . 00292		CY .00316 .00286 .00331		.00241 .00258 .00259 .00289
	BETA BRUDDER B	.00/ 5.00	CLM .04741 .05197 .06029	0/ 5.00	CLM .04404 .04986 .05809 .00310	0/ 5.00	CLM .04222 .04878 .05762	00/ 5.00	CLM . 04118 . 04764 . 05558	0/ 5.00	CLM .03793 .04539 .05481
		• 5	CD . 05294 . 05504 . 06108 . 00195	VAL = -5.00/	CD . 05380 . 05605 . 06189 . 00176	VAL = ~5.00/	CD . 05397 . 0587 . 06307	* ਨੂੰ	CD .05483 .05817 .05469	/AL = -5.00/	CD . 05644 . 05090 . 06819 . 00253
		GRADIENT INTERVAL	CL .11084 .16378 .22732 .02787	GRADIENT INTERVAL	CL .11534 .16995 .23263 .02596	GRADIENT INTERVAL	CL .10882 .17686 .23951 .02789	GRADIENT INTERVAL	CL . 11956 . 18293 . 24702 . 02846	GRADIENT INTERVAL	CL .1721 .19605 .26473 .03235
		3.34 GRA	DY 20611 16472 00992	3.33 GRA	DY 18525 09697 15793	3.33 GRA	07 -,11137 -,24594 -,19440	3.32 GRA(DY 17204 23071 11928	3.33 GRA	DY 19008 25348 25259 01453
	0000 IN. YO 0000 IN. YO 0000 IN. ZO	RN/L =	0X . 05551 . 06801 06491 02885	FN/L ≠	0X -,18828 -,01853 -,01836	RN/L =	0X 15837 06994 07054	RN/L =	0X 15706 10634 10635	RN/L =	08435 08435 09984 09113
	# 1109. # 375.	. 211/0	ALPHAO 4.13765 6.12604 8.25467 98490	. 212/ 0	AL PHAO 4.09240 6.25655 8.27549 .92981	213/ 0	ALPHAO 3.93747 6.31405 8.35993 9.507	214/ 0	ALPHAO 4.11715 6.35432 8.36005 9.963	215/ 0	ALPHAO 4.01695 6.37588 8.33645 9.850
E DATA	FT. XMRP YMRP ZMRP	RUN NO.	. 59032 . 58980 . 58919 - 00027	RUN NO.	MACH .58936 .59041 .59012	RUN NO.	MACH .58982 .58989 .59053 .00015	RUN NO.	MACH .58985 .59025 .59031	RUN NO.	MACH . 58938 . 58988 . 58886
REFERENCE DAT	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN.		AL PHAC . 173 2.255 4.353 GRADIENT		ALPHAC 126 2 . 399 4 . 355 GRAD IENT		ALPHAC 253 2 . 398 4 . 4 13 GRAD IENT		ALPHAC 052 2 . 452 4 . 403 GRAD IENT		ALPHAC 137 2 . 487 9 . 402 GRAD1ENT
	SREF = CREF = CREF = CREF = CREF = CALE = CALE = CREF = CALE = CREF = CR		3.110 3.078 3.099		02 7.673 7.105 7.181		DZ 9.888 10.133 9.983		DZ 14.808 14.795 14.946		02 29.743 29.755 29.747

	15 1					CBL 00130 00154 00112	75)		2000	000.	1	CBL 00131 00119 00083	ļ	.00141 00141 00150 00007		CBL	- 00133 - 00133 - 00008
	. 08 OCT .	ATA	CTAR = -1	1 F F		CYN . 00061 . 00064 . 00001	(08 OCT	DATA		SIAB : ELEVON : DX : MACH :		CYN .00059 .00042 00038		CYN .00067 .00034 00045		CAN	91000 \$2000 \$1000
	(CNH021)	PARAMETRIC DA				. 000163 . 00189 . 00186 . 00010	(CNHO22)	PARAMETRIC [000.8		CY .00279 .00341 .00430		CY . 00338 . 00472 . 00030		۲	.00215 .00311 .00606 .00083
		Ā		BEIA RUDOER = 10RB = DY =	5.00	CLM .03645 .04454 .05358 .00380		α.		#.98×	5.00	CLM .05895 .06696 .07284	0/ 5.00	CLM .05723 .06573 .07118	00/ 2.00	E TO	.05534 .05525 .070.2
	TER DATA)		1	n α → C	L = -5.00/	CD . 05765 . 06283 . 07013	TER DATA)				AL = -5.00/	.06966 .06966 .08494 .10919	AL = -5.00/	CD . 07076 . 08654 . 11014	5.	ç	.07055 .08780 .11280
	O2S1 (ORBITER				ENT INTERVAL	CL .11722 .2113 .27695 .03601	0251 (ORBITER				GRADIENT INTERVAL	CL .32322 .39060 .47504 .03684	GRADIENT INTERVAL	CL .32555 .39462 .47846	GRADIENT INTERVAL	ō	.31830 .40138 .48539
	747/1 AT1				.33 GRADIENT	07 25920 27177 15241	1747/1 ATI				.31	0Y 11696 21394 21015 02258	3.31 GRAD	DY 19570 15123 17388	3.31 GRA		. 24112 18222 21425 21425
DATA - CA23B	14-120(CA23B)			00 IN. X0 00 IN. Y0 00 IN. Z0	RN/L = 3.	CX 01984 11469 16824 03368	14-120(CA23B)			0000 IN. X0 0000 IN. Y0 0000 IN. Z0	RN/L = 3	0X 16244 05073 15546 .00246	RN/L =	0X 20800 06785 15342 15348	1/N2		0x -, 19848 -, 05808 -, 03055
SOURCE	Jak	,			216/0	AL PHAO 4.02468 6.42453 8.25444 95288	JAA	2		1109.00 10.00 10.00 10.00	. 221/ 0	ALPHAO 8.11954 10.26950 12.37650 1.01450	. 222/ 0	m 5 12		•	ALPHAO 8.01212 10.42410 12.40420 .95356
TARIN ATED			DATA	T. XMRP YMRP ZMRP	NO.	MACH .58927 .58928 .58963			E DATA	FT. XMRP YMRP ZMRP	BUN NO.	MACH . 58751 . 58636 . 58649	ON NI R	MACH .58707 .58734 .58785	<u> </u>		MACH .58685 .58648 .58705
טר			REFERENCE DAT	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		ALPHAC 114 2.547 4.315 GRADIENT			REFERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		ALPHAC . 180 2.374 4.374		ALPHAC 095 2. 462 4. 329			ALPHAC 131 2.479 4.467 GRADIENT
Č	UAIE CC TAN			SREF = 2 LREF = BREF = SCA!E =	!	02 44.609 44.499 44.744				SREF = . LREF = . BREF = .		02 7.175 7.048 7.827		02 10.008 9.794 10.168			02 14.875 15.107 14.650

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TABULATED SOURCE DATA - CA23B

175)		5, 000 . 000 . 600		CBL00151001740011600007		CBL 00153 00144 00113		CBL 00145 00142 00118	1 75)				CBL000870013200010
(08 OCT	DATA			. 00051 . 00014 00040		CYN .00048 .00010 00035		CYN .00063 .00013 00025	3) (08 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN .00077 .00055 00056
(CNHO22)	PARAMETRIC	000. 000. 8		CY . 002554 . 00305 . 00468		CY .00209 .00240 .00428		CY .00237 .00239 .00481	(CNH023	PARAMETRIC	000.		CY .00317 .00326 .00378
		BETA = RUDDER = 10RB = DY	0/ 5.00	CLM .05342 .06292 .06715	0/ 5.00	CLM .05170 .06112 .06465	0/ 5.00	CLM .05120 .05030 .06379			BETA = RUDDER = 10RB = DY	7 5.00	CLM .05058 .05179 .07102
(ORBITER DATA)			/AL = -5.00/	.07174 .09086 .11872	/AL = -5.00/	CD .07255 .09205 .12035	AL = -5.00/	CD .07275 .09168 .12285	(ORBITER DATA)			AL * -5.00/	CD . 05934 . 05722 . 07781
AT1 02S1 (OR			GRADIENT INTERVAL	CL .31787 .41218 .50728	GRADIENT INTERVAL	CL .31483 .41711 .51553 .04515	GRADIENT INTERVAL	CL .31404 .41323 .52194 .04520	0251			GRADIENT INTERVAL	CL .22048 .23825 .33985 .02755
747/1			3.31 GRA	DY 11844 13268 19792 01678	3.31 GRA	DY 19464 22195 16737 .00496	3.30 GRAD	DY 17679 25490 12834 .00863	3) 747/1 ATI			3.31 GRAD	0Y 23409 28051 33921 02409
14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	DX 10589 08622 18388 01553	FN/L *	0x -, 04496 -, 06430 -, 18464 -, 02995	RN/L =	0X -,00488 -,00681 -,14747 -,02976	14-120(CA23B)		0000 IN. YO 0000 IN. YO 0000 IN. ZO	RN/L =	DX 09825 15849 07571
ARC		1109.	. 224/ 0	ALPHAO 7.98338 10.47220 12.37080	. 225/ 0	ALPHAO B.00014 10.43710 12.28420	. 226/ 0	ALPHAO B.01035 10.37780 12.41190	ARC		1109.0. 0. 10. 175.0	. 231/ 0	ALPHAO 5.96832 8.39557 10.26840
	REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	MACH . 58892 . 58798 . 58896 00002	RUN NO	MACH .58819 .58859 .58930 .00024	RUN NO	MACH .58776 .58928 .58796		E DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	МАСН . 58722 . 54690 . 58675 00011
	REFEREN	2690.0000 SC 474.8100 IN 936.6800 IN		ALPHAC 130 2.540 4.360 GRADIENT		ALPHAC 097 2.520 4.300 GRADIENT		ALPHAC 122 2.456 4.443 GRADIENT		REFERENCE DATA	2690.0000 SO. 474.8100 IN. 936.6800 IN.		ALPHAC .028 P.478 4.342 GRAD1ENT
		SREF = ; LREF = BREF = SCALE =		02 29.663 30.014 30.212		DZ 44.608 44.758 44.921		02 50.329 50.199 50.308			SREF = 2 LREF = BREF = SCALE =		DZ 3.160 3.398 3.235

165	15)		5.000 .000 .600		CBL 00116 00111 00151		CBL 00116 00132 00148 00007		CBL 00113 00142 00145		CBL 00133 00139 00159		CBL 00143 00128 00138				
PAGE	(08 OCT	DATA	STAB = ELEVON = DX = MACH =			CYN .00075 .00063 .00034 00009		CYN .00072 .00063 .00038		CYN .00078 .00049 .00040		CYN .00070 .00058 .00051		CYN .00058 .00042 .00012			
	(CNH023)	PARAMETRIC D	000.9		CY .00305 .00300 .00294 00002		CY . 00282 . 00337 . 00308		CY .00280 .00281 .00326		CY .00242 .00275 .00297 .0000		.00183 .00194 .00244 .00013				
	ARC 14-120(CA23B) 747/1 ATI 02SI (ORBITER DATA)	u	BETA # RUDDER # 10RB # DY	RUDOER # 10RB # DY # 10	CLM .04828 .05945 .06857	/ 5.00	. 04747 . 05848 . 05806 . 00457	/ 5.00	CLM .04599 .05861 .06641	/ 5.00	CLM . 04360 . 05531 . 06476 . 00468	00 - 2 - 00	.04238 .05370 .05370 .06270				
				AL = -5.00/	CD .05999 .06705 .07907	AL = -5.00/	.06049 .06774 .07972 .07972	AL = -5.00	. 06097 . 06886 . 08122	/AL = -5.00/	. 06225 . 07087 . 08587 . 08587	/AL = -5.00/	CD . 06317 . 07212 . 08828				
				GRADIENT INTERVAL	CL . 22450 . 28278 . 34392 . 02579	GRADIENT INTERVAL	CL .22535 .28386 .34973 .02745	GRADIENT INTERVAL	CL . 22328 . 35230 . 35230	GRADIENT INTERVAL	CL . 22294 . 29434 . 37769	GRADIENT INTERVAL	Ct .22169 .390012 .39000				
50				3.31 GRAD	DY 25234 21173 26838 00257	3.31 GPAC	07 30779 30356 32484 00354	3.31 GRAE	07 27927 33790 31874 00958	3.31 GRA	07 -, 25442 -, 21638 -, 28957 -, 00653	3.31 GPA	DY 30457 27163 27769				
DATA - CA23B			.00000 IN. XO .00000 IN. YO .00000 IN. ZO	RN/L =	DX 15115 .02879 09076	EN/L =	0x 10027 03724 03599	RN/L =	049631 09631 09613	RI:/L =	0x 13999 00939 17552	RN/L =	0.01963 12451 16344				
7 76 TABULATED SOURCE			1109.0 2 .0 375.0	232/ 0	ALPHAO 5.98727 8.31873 10.35950	233/ 0	ALPHAO 6.07114 8.36328 10.33770	234/ 0	ALPHAO 6.07355 8.40095 10.36750	. 235/ 0	AL PHAO 6.07234 8.35515 10.39440	. 236/ 0	ALPHAO 6.08798 8.23718 10.36730				
		DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH .58689 .58783 .00011	MACH 58710 58742 58742 00007	. 58742 . 58742 . 00007	MACH .58866 .58715 .58701 00038	RUN NO.	MACH . 58751 . 58780 . 58780	RUN NO	MACH .58642 .58834 .58776					
		REFERENCE DATA	REFERENCE	REFERENCE	REFERENCE	REFERENCE	REFERENCE	2690.0000 SO.F. 474.8100 IN. 936.6800 IN.		ALPHAC 157 2.438 4.444 GRADIENT		AL PHAC 079 2 . 449 4 . 418 GRAD I ENT		AL PHAC 060 2 . 510 4 . 425 GRAD IENT		ALPHAC 083 2.454 4.441 GRADIENT	
DATE 22 MAR			SREF = 2 LREF = BREF = SCALE =		02 7.044 7.210 7.208		02 9.588 9.981 9.714		02 14.480 14.703 14.839		02 29. 767 29. 7 ⁴³ 29. 929		02 44 . 538 44 . 54 1 1 45 . 44				

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22 MAR	76	TABULATED	TED SOURCE	DATA -	9 747/1	AT1 02S1 (ORE	(ORBITER DATA)		(CNH023	PAGE (3) (08 OCT	3E 166 3T 75 1
	REFERENCE	DATA							PARAMETRIC	DATA	
265 4.7 93	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN.	T. XMRP YMRP ZMRP	1109.0 3. 375.0	0000 IN. XO 0000 IN. YO				BETA = RUDDER = 10RB = DY	000. 9000.	STAB # ELEVON # DX # MACH #	5.000 .000 .000 .000
		RUN NO.	237/ 0	RN/L #	3.31 GRAI	GRADIENT INTERVAL	/AL = -5.00,	0/ 5.00			
02 49.951 49.970 50.050 6	ALPHAC 140 2.539 4.426 GRADIENT	MACH . 58726 . 58814 . 58821	ALPHAO 5.98166 8.41739 10.35530	0X .07546 16393 17706 05759	DY 38741 35672 34245 09995	CL .21572 .30726 .39120	CD . 05328 . 07338 . 08888	CLM .04147 .05418 .06216	.00190 .00219 .002197 .00197	00062 000048 000169 01000	CBL 00126 00136 00120
			ARC	14-120(CA23B)	747/1 A	T1 0251 (ORE	(ORBITER DATA)		(CNHO24)	4) (2) OCT	1 75 1
	REFERENCE DATA	DATA							PARAMETRIC	DATA	
2690 474 936	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN. .0125	T. XMRP YMRP ZMRP	= 1109.0 = 375.0	0000 IN. XO 0000 IN. YO 0000 IN. ZO				BETA RUDDER II 10RB II DY		STAB = ELEVON = DX MACH =	-1.000 .000 .000 .600
		RUN NO.	241/0	RN/L =	3.30 GRA	GRADIENT INTERVAL	/AL = -5.00/	0/ 5.00			
. 790 1. 147 1. 235	ALPHAC . 104 2.378 4.362 GRADIENT	MACH . \$8652 . \$8700 . 58753 . 00024	ALPHAO 5.92147 8.27250 10.30860 1.02571	0x -,15532 -,05770 -,08859	DY 03671 03732 02095 0360	CL .21137 .27816 .33817 .02963	. 05803 . 05817 . 05517 . 07658	CLM .05095 .05208 .07124	CY .00309 .00379 .00296 00002	CYN . 00073 . 00067 . 00034 00009	CBL 00118 00114 00142
		RUN NO.	245/0	RN/L =	3.30	GRADIENT INTERVAL	/AL = -5.00/	2/ 5.00			
2 214 . 169 . 223	AL PHAC - 107 2 - 445 4 - 433 GRADIENT	MACH . 58739 . 58740 . 58743 . 00001	ALPHAO 6.05432 8.32441 10.35700	0x 15883 04069 07466	DY 13415 07016 00760	CL .22446 .34450 .02623	. 05906 . 05906 . 05615 . 07819	CLM .04878 .05951 .05931	CY .00334 .00388 .00366	CYN .00077 .00076 .00043	CBL 00125 00117 00155
		BUN NO.	243/ 0	RN/L =	3.30 GRAI	GRADIENT INTERV	/AL = -5.00,	3/ 5.00			
. 900 . 833 . 797	ALPHAC 036 2.466 4.354 GRAD:ENT	MACH .58773 .58745 .58776	ALPHAO 6.13824 8.35642 10.29090	DX 18639 .00386 10428	DY 04378 04115 09073 01008	CL . 28659 . 28339 . 34274 . 02624	. 05967 . 05967 . 05676 . 07828	CLM .04809 .05933 .06786	CY .00260 .00365 .00299	CYN .00072 .00070 .00034	CBL 00114 00123 00159

167	75)		-1.000 .000 .000 .600	•	CBL		CBL 00154 00158 00177 00005		CBL 00147 00170 00152		CBL 00166 00163 00145
PAGE	. (21 OCT	DATA	STAB = ELEVON = OX = MACH =		CY CYN . 00076 . 000291 . 00057 . 00285 . 00057 . 000359 000046 00007		CYN . 00069 . 00046 . 00031		CYN .00058 .00041 .00027		CYN .00054 .00017 00008
	(CNHOS#)	PARAMETRIC [000.				CY .00264 .00258 .00382		CY .00179 .00230 .00287		CY .00195 .00242 .00200
		•	BETA = RUDDER = 10RB = DY	AL = -5.00/ 5.00	CLM .04569 .05790 .06632	AL = -5.00/ 5.00	CLM .04377 .05567 .06496	/ 5.00	CLM .04177 .05392 .06241 .00452	.00554 :RVAL = -5.00/	.05411 .05411 .06139
	(ORBITER DATA)				.05997 .06757 .07880		.06170 .07041 .08545	'AL = -5.00/	CD .06257 .07209 .08821		CD .06301 .07317 .08779 .00540
TABULATED SOURCE DATA - CA238	0251			GRADIENT INTERVAL	CL .21919 .28525 .34606	GRADIENT INTERVAL	CL .22314 .29697 .37666 .03371	GRADIENT INTERVAL	CL -21715 -38272 -38995 -03762		CL .22024 .30996 .38783
	33 747/1 AT1			3.30 GRA	70 00497 02456 04104 00897	3.29 GP.AC	07 04473 01269 06341 00354	3.28 GRAE	DY 05457 09489 18341 02770	3.28 GRA	07 -,02120 -,03470 -,10654
	ARC 14-120 (CA23B)		9.0000 IN. XO .0000 IN. YO 5.0000 IN. ZO	RN/L =	0x 12109 .06072 02626 .02495	RN/L ≈	DX 10332 03171 14258 00737	RN/L ≈	01971 .01971 16845 16873	RN/L =	05285 .05285 .20397 .10617
			1109.0 = .0 = 375.0	244/ 0	ALPHAO 6.00907 8.38433 10.19090	245/0	ALPHAO 6.07204 8.35352 10.42190	246/ 0	ALPHAO 5.98327 8.30857 10.42130	. 247/ 0	ALPHAO 6.01605 8.42955 10.32850
		DATA	T. XMRP YMRP ZMRP	RUN NO.	масн .58789 .58804 .58739 00010	RUN NO.	MACH .58755 .58755 .58751 00001	RUN NO.	MACH .58586 .58578 .58714	RUN NO.	MACH .58611 .58686 .58763
AR 76		REFERENCE DATA	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN. .0125		ALPHAC 163 2.499 4.287 GRADIENT	ALPHAC 163 2.499 4.287 GRADIENT			ALPHAC 131 2.390 4.445 GRADIENT		ALPHAC 101 2.534 4.394 GRADIENT
DATE 22 MAR			SREF = ; LREF = BREF = SCALE =		02 14.827 14.725 14.404		D2 29.598 29.897 29.731		DZ 44.528 44.796 44.981		DZ 49.996 50.084 50.059

TABULATED SOURCE DATA - CA238

				7.8 03.4 03.4 03.4		6 4 2 2 8 8 8 9 8 9 8 9 9 9 9 9 9 9 9 9 9 9		68 13 13		63 14 14		ក ខេត្ត - ឧទ្ធភ	
5) (21 OCT 75)		-1.000 .000 .000 .600		CBL 00124 00126 00134 00002		CBL 00149 00134 00112		CBL00168001760011300113		CBL 00163 00141 00097		CBL 00154 00055 00082	
	DATA	BETA = .000 STAB = RUDDER = .000 ELEVON = 10RB = 8.000 DX = DY = .000 MACH = .5.00/ 5.00		CYN .00075 .00040 00008		CYN . 00060 . 00029 00029		CYN .00062 .00029 00038		CYN .00056 .00026 00040		CYN .00056 .00020 00038	
(CNH025)	PARAMETR1C		0000	• • • •	CY .00389 .00350 .00479		CY .00321 .00307 .00550		CY .00371 .00366 .00426		.00300 .00318 .00428		CY .00281 .00385 .00385
	L.		ETA UDDER ORB Y	CLM . 05772 . 05638 . 07264 . 00347	0/ 5.00	CLM .05714 .06494 .07199	0/ 5.00	CLM .05606 .05515 .07034	00.5 /0	CLM .05293 .06247 .06721	3/ 5.00	CLM .05116 .05040 .05474 .00302	
(ORBITER DATA)			ı. R	CD .06763 .08245 .10451	/AL * -5.00,	CD .06821 .08332 .10938	/AL = -5,00,	CD .05914 .08603 .10890	/AL = -5.00/	CD .07023 .08858 .11728	/AL = -5.00/	.07126 .08949 .12037	
AT1 0251 (OR			GRADIENT INTERVAL	CL .31259 .38355 .45958 .03397	GRADIENT INTERVAL	CL .31706 .38198 .47699 .03530	GRADIENT INTERVAL	CL .31718 .39605 .47466 .03558	GRADIENT INTERVAL	CL .31289 .40182 .50327	GRADIENT INTERVAL	CL .31097 .40676 .51655 .04500	
747/1	E DATA		3.31 GRA	. 11623 .00464 00023	3.31 GRA	. 10359 .05505 .02201 01816	3.30 GRA	04505 .02168 .03326	3.31 GRA	04759 .00837 .00837 .02070	3.32 GRA[DY 01682 01804 00795	
14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L *	0x -,09563 -,08863 -,05354 -,00956	EN/L =	0X -,08374 -,03608 -,07388 -,00260	RN/L *	0x 11966 06077 09089	RN/L =	0x 13995 12322 19907 01187	RN/L =	0x 06606 11022 19317 02761	
ARC		2690.0000 SQ.FT. XMRP = 1109.(474.8100 IN. YMRP = .(936.6800 IN. ZMRP = 375.(0 /0	ALPHAO 8.00091 10.24160 12.30340	0 /0 .	ALPHAO 8.05788 10.31470 12.45100	0 /0	AL PHAO 8.10708 10.48700 12.33140	0 /0	ALPHAO 7.96542 10.41380 12.44160	0 /0	ALPHAO 7.96473 10.31080 12.38870 .97236	
			RUN NO	MACH .58717 .58827 .58735	NON NO	MACH .58781 .58810 .58756	RUN NO	MACH .58691 .58837 .58726	RUN NO.	MACH .58717 .58826 .58845	RUN NO.	MACH .58877 .58815 .58767	
	REFERENCE DATA			ALPHAC .039 2.367 4.353 GRADIENT		ALPHAC 027 2.372 4.478 GRADIENT		ALPHAC 013 2.543 4.374 GRADIENT		ALPHAC 162 2.450 4.437 GRADIENT		ALPHAC 132 2.364 4.412 GRADIENT	
		SREF = CREF = SCALE =		02 7.209 7.316 7.326		02 9.339 10.040 10.061		DZ 14.643 15.082 14.801		02 29.827 30.228 30.232		DZ 44.600 45.018 44.806	

169	. 27		0000		CBL -, 0/125 -, 00142 -, 00105 , 00004	1 75)		5.000	000		CBL 00224 00236 00220		CBL 00232 00208 00237 00001		CBL 00257 00246 00217
PAGE) (21 OCT	DATA	STAB E ELEVON B OX MACH B		CYN .00058 .00016 00027	1) (21 OCT	DATA		ELEVON # DX # MACH #		CYN - 00011 - 00014 - 00114 - 00024		. 00005 - 00035 - 00097		CYN 00044 00081 00139
	(CNH025)	PARAMETR1C	00000		CY .00223 .00437 .0045	(CNH027)	PARAMETRIC	000	8.000 000 000		. 00701 . 00828 . 00877 . 00042		.00776 .00776 .00726 .00931		CY .00805 .00849 .01134
			BETA REVDOER 10R8 DY	0/ 5.00	CLM .04989 .06395 .06395			BETA =	RUDDER = 10RB =	00/ 5.00	CLM .04290 .05179 .05619	00/ 5.00	CLM .04049 .05093 .05384	.00/ 5.00	CLM .03935 .04880 .05224 .00283
	(ORBITER DATA)			/AL = -5.00/	. 07094 . 09176 . 12110	(ORETTER DATA)				الة - 5.	CD .05219 .06615 .08957 .00876	L = +5.	.05242 .05242 .06799 .09008	<u> </u>	CD . 05184 . 05833 . 09513
	025!			GRADIENT INTERVAL	.30597 .41685 .51974 .04639	1 0321				GRADIENT INTERVA	CL .31854 .29025 .47588	GRADIENT INTERVAL	CL .32135 .39715 .47653	GRADIENT INTERVAL	CL .32023 .40087 .49592 .03767
æ	1 747/1 ATI			.32	DY 05236 .03018 .07273	3) 747/1 AT				3.28 GRA	07740 .09110 .09115 00757	3.28 GRA	DY .10647 .03987 .06373	3.27 GRA	DY .05635 .03567 .04642 00242
DATA - CA23B	14-120(CA23B)		0000 IN. YO	RN/L = 3	. 02097 09531 20688 04939	14-120(CA23B)		3	.0000 IN. YO	RN/L *	DX 10996 10062 14232 00740	RN/L =	0X 17277 05317 08957	RN/L =	0x 19035 08235 15821 .00653
TABULATED SOURCE	ARC		1109.00 200 375.00	0 /0	ALPHAO 7.83733 10.43110 12.37400 .99048	ARC			1109	. 261/ 0	ALPHAO 8.02000 10.17530 12.29900 1.00780	. 252/ 0	ALPHAO 7.97537 10.34850 12.31440). 263/ 0	ALPHAO 8.01548 10.39363 12.50650
TABULA		E DATA	FT. XMRP YMRP ZMRP	NON NO	MACH .58747 .58807 .58684		DE DATA		FT. XMRP YMRP ZMRP	RUN NO	MACH .58593 .58706 .58635	NON NO	MACH 58550 58520 58597	RUN NO	MACH .58646 .58698 .58597
IR 76		REFERENCE DATA	2690.0000 SQ. 474.8100 IN. 936.6800 IN.		ALPHAC 233 2.449 4.339 GRADIENT		RFFERENCE		2690.0000 SQ 474.8100 IN 936.6800 IN		ALPHAC . 046 2.283 4.268 GRADIENT		ALPHAC 171 2.437 4.384 GRADIENT		ALPHAC 143 2.462 4.479 GRADIENT
DATE 22 MAR			SREF = 6 LREF = 6 BREF = 8 SCALE = 6	ı	ORIGINA ORIGINA	 1	D A (SREF = BILLEREF = SCALE = SCALE =		DZ 7.310 7.309 7.865		02 9.835 9.901 9.652		02 14.936 14.990 15.447
					ORIGINA OF POO	R 9	UA	L	ITM.						

1 75 J		5.003 .000 .000 .600		CBL 00275 00240 00229		CBL 00262 00263 00215		CBL 00264 00254 00206	1 75)		5.000 .000 10.000		CBL 00187 00228 00020
	DATA	STAB = ELEVON = DX =		CYN 00034 00134 00134		CYN 00050 00074 00133		CYN 00029 00073 00136	. 2	DATA	STAB E ELEVON E DX E		CYN .00018 .00008
COHOS	PARAMETR1C	000.8		CY .00830 .00839 .01053		CY .00772 .00840 .00983 .00045		.00816 .00814 .00964 .00964	CNHOS	PARAMETRIC	000.		CY .00829 .00826
		BETA = RUDDER = 10RB = 0Y	0/ 5.00	CLM .03492 .04535 .04861 .00307	0/ 5.00	CLM .03411 .0462 .04645 .00283	0/ 5.00	CLM .03224 .04331 .04611			BETA = RUDDER = 10RB = DY	0/ 5.00	CLM .04146 .05055
BITER DATA)			* -5.	. 05364 . 05364 . 09894 . 00974		. 05480 . 07422 . 10182	# 10,	. 054 92 . 07334 . 10381 . 01054	BITER DATA)			, a	00 - 04962 - 05046 - 00535
1520			DIENT INTER	.32016 .41319 .51046	DIENT INTER	CL .32317 .42241 .52283 .04397		CL .31625 .41737 .52972 .04641	0351				CL .27650 .33345 .02817
747/1			.27	07 .03516 .05502 .01473	.27	07 .00438 .06035 02875 00540	.28	70 .04605 .05734 .07898	1/27/1			85.	DY .00383 .14029 .06751
14-120(CA23		1000 IN. XO 1000 IN. YO 1000 IN. ZO	RN/L	0x 14677 10279 13616	FN/L =	0X 08756 09962 18554 02062	RN/L =	DX .06098 13316 16478 05071			000 IN. XO 000 IN. YO 000 IN. ZO	RN/L = 3	9.88371 9.89507 0.00611
ARC		N 13 W	. 264/ 0	ALPHAO 7.95935 10.44460 12.37600 .96822	. 265/ 0	ALPHAO 7.98864 10.45630 12.35100	. 266/ 0	ALPHAO 7.98867 10.34730 12.39560	ARC		0.011 # 0.09.01 0.0375 #	581/ 0	ALPHAO 8.29095 10.38510 1.03598
	E DATA	·	RUN NO	MACH .58652 .58531 .58590 00016	RUN NO	MACH .58533 .58607 .58533	AUN NO	MACH . 58469 . 58577 . 58519		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .58657 .58709 .00026
	REFERENC	2690.0000 SQ. 474.8100 IN. 936.6800 IN.		ALPHAC 161 2.529 4.385 GRADIENT		ALPHAC 113 2.534 4.379 GRAD!ENT		AL PHAC 137 2 . 437 4 . 427 GRADIENT		REFERENC	0000 SO 8100 IN 6800 IN		ALPHAC 2.450 4.481 GRADIENT
		SREF # LREF # BREF # SCALE #		DZ 29.711 29.841 30.092		D2 44.673 44.791 44.852		DZ 50.205 50.115 50.310			SREF = C		02 3.140 3.154
	14-120(CA23B) 747/1 ATI 03SI (ORBITER DATA) (CNH027) (21 OCT	14-120(CA23B) 747/1 ATI 03SI (ORBITER DATA) (CNH027) (21 OCT	ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA) REFERENCE DATA REFERENCE DAT	ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA) REFERENCE DATA 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO 474.8100 IN. YMRP = .0000 IN. YO 474.8100 IN. YMRP = .0000 IN. YO 10RB = 8.000 ELEVON = 1086.6800 IN. ZO 784.8100 IN. ZMRP = .0000 IN. ZO 826.6800 IN. ZMRP = .0000 IN. ZO 10RB = 8.000 DX = .000 MACH = .000	REFERENCE DATA RAMETRIC DATA RAM	### REFERENCE DATA REFERENCE DATA PARAMETRIC DATA PARAMETRIC DATA PARAMETRIC DATA	REFERENCE DATA PARMETRIC DATA PARM	REFERENCE DATA ALPHAO N. YOR ALPHAO N. YOR ALPHAO N. YOR ALPHAC AL	Reference Data Parametric	Reference Data Parametrial Companies Parametrial	The color of the	Parkerice Data Park	The color of the

171	, 57		5.000 .000 .000 .600		CBL 00212 00249 00016		CBL 00218 00245 00011		CBL 00232 00259 00011		CBL 00237 00273 00016		CBL 00230 00224 .00003		CBL 00237 00238 00000
PAGE	(21 OCT	DATA	STAB = ELEVON = Dx = MACH =		CYN .00014 00005		CYN 00008 00023 00006		CYN 00010 00023 00005		CYN 00025 00041 00007		CYN 00036 00048		CYN 00028 00057
	(CNH02B)	PARAMETRIC [000.		CY .00814 .00801 00005		CY .00753 .00767		CY .00748 .00735 00005		CY .007 35 .00788 .00022		CY .00703 .00768		. 00712 . 00759 . 00019
		u.	BETA = RUDDER = 10RB = DY	5.00	CLM .03720 .04606 .00371	5.00	CLM .03572 .04501 .00384	/ 5.00	CLM .03377 .04297 .00375	/ 5.00	CLM .03368 .04372 .00430	7 5.00	CLM .03263 .04307 .00430	00.5 /(CLM . 03265 . 04334 . 00431
	(ORBITER DATA)		B.E C	AL = -5.00/	CD .04991 .05083 .00457	AL = -5.00,	CD .05022 .06224 .00497	AL = -5.00/	. 05050 . 06249 . 00488	/AL = -5.00,	CD .05358 .06765	/AL = -5.00/	CD . 05435 . 07086	VAL = -5.00/	.05452 .05452 .07135
	0351			GRADIENT INTERVAL	CL . 28633 . 34279 . 02364	GRADIENT INTERVAL	CL , 28964 , 35024 , 02505	GRADIENT INTERV	ct , 29105 , 34995 , 02399	GRADIENT INTERVAL	CL .30400 .37830 .03181	GRADIENT INTERVAL	CL .30245 .39338 .03745	GRADIENT INTERVAL	CL .30621 .39960 .03768
8	3) 747/1 ATI			3.28 GRAC	DY .02441 .03213 .00324	3.28 GAA[0Y ~.00656 .07583 .03405	3.28 GRAI	77 .07964 .01744 02534	3.29 GRA	0Y .05921 .06578 .00282	3.29 GRA	07 01014 .09425 .04299	3.29 GRA	07 .05490 .01787 01494
DATA - CA23B	14-120(CA23B)		.00000 IN. XO .00000 IN. XO	RN/L =	0.89112 10.03350 0.05963	RN/L =	0x 9.90835 9.98861 03317	RN/L =	0X 9.91614 10.04080	RN/L =	0x 9.85463 9.93482 0.3434	RN/L *	0X 9.89025 9.85318 01527	RN/L =	0x 9.95888 9.91845 01631
TABULATED SOURCE	ARC		1109.0 2.0 375.0	282/ 0	ALPHA0 B.14688 10.29500	283/ 0	ALPHA0 8.17312 10.40820	284/ 0	ALPHAO 8.11471 10.33430 .90410	. 285/ 0	ALPHA0 8.28511 10.41500	. 286/ 0	ALPHAO B. 18310 10.47830	. 287/ 0	ALPHAO 8.14261 10.46300 .93625
TABULA		DATA	T. XMRP YMRP ZMRP	PUN NO.	MACH .58775 .58829	RUN NO.	MACH .58638 .58659	RUN NO.	MACH .58596 .58697 .00001	RUN NO	MACH 58699 58714 00006	RUN NO	MACH .58656 .58637 00008	RUN NO	MACH . 58636 . 58579 . 00018
IR 76		REFERENCE DATA	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN.		ALPHAC 2.022 4.410 GRADIENT		ALPHAC 2.058 4.488 GRADIENT		ALPHAC 2.026 4.481 GRADIENT		ALPHAC 2.180 4.515 GRADIENT		ALPHAC 2.093 4.521 GRADIENT		AL PHAC 2.061 4.539 GRAD;ENT
DATE 22 MAR			SREF = 6 LREF = 6 BREF = 5 SCALE =		02 7.424 7.504		DZ 9.851 9.970		02 14.671 14.337		02 29.878 29.674		02 44,780 45.100		02 50.200 50.258

### PAGE FRENCE DATA FEFFERICE DATA APPLICATION CARRIED APP															
REFERENCE DATA REFE	7				CBL 00235 00289		CBL 00215 00265 00021		CBL 00228 00244 00007		CBL 00242 00219		CBL 00258 00200 .00255		CBL 00212 00211
### FEFFERENCE DATA ### FEFFE	(21 ATA	Z	z	DX MACH	CYN -,00024 -,00066 -,00022		CYN 00026 00087 00025		CYN 00049 00113		CYN 00065 00138 00031		CYN 00063 00131 00029		CYN 00045 00108 00025
#EFFERENCE DATA #EFFERENCE DATA #EFFERENCE DATA #FEFFERENCE #FEFFERENCE #FEFFERENCE #FEFFERENCE #FEFFERENCE #FEFFERENCE #FEFFERENCE #FEFFERENCE #	(CNHO29	000.8	PARAMETRIC . 000	000 000 000	CY .00813 .00938		CY .00789 .00913		CY .00763 .00864 .00042		CY .00769 .00971		CY . 00769 . 00939		CY .00755 .00935
## FEFERICE DATA ## C 14-120(CA23B) 747/1 ATI 0351 (ORBITER DATA ## C 14-120(CA23B) 747/1 ATI 0351 (ORBITER DATA ## C 14-120(CA23B) 747/1 ATI 0351 (ORBITER DATA ## C 1000		<u>α</u>	<u>د</u> انا	ORB ≺ 5.00	CLM .04835 .05271	ហ	CLM . 04625 . 05036 . 00169	5.0	CLM .04412 .04807 .00165		CLM . 04290 . 04566	ស	CLM .04194 .04497 .00128	Ŋ	CLM .04152 .04488 .00133
## Company of the Park	BITER DATA)			• ڻ	CD .06659 .08765	ا گ	CD .06613 .08942	n L	CD .06660 .08973 .00967		CD .07047 .09868	**	CD . 07092 . 10218	# fb	CD .07061 .10498 .01364
### REFERENCE DATA ### REFERENCE DATA ### REFERENCE DATA ### REFERENCE DATA ### RUN NO. 291/ 0 RN/L = 3.29 ### RUN NO. 292/ 0 RN/L = 3.29 ### RUN NO. 292/ 0 RN/L = 3.28 ### RUN NO. 292/ 0 RN/L = 3.28 ### RUN NO. 293/ 0 RN/L = 3.28 ### RUN NO. 293/ 0 RN/L = 3.28 ### RUN NO. 293/ 0 RN/L = 3.29 ### RUN NO. 295/ 0 RN/L = 3.29 ### RUN NO. 296/ 0 RN/L = 3.29				DIENT INTER	CL .38697 .46421 .03905	DIENT INTER	CL .38881 .47236 .03439	DIENT INTER	CL .39230 .47393 .03412	DIENT INTER	CL .40908 .50740	SENT INTER	CL .40655 .52122	DIENT INTER	CL .40652 .53118 .04947
### REFERENCE DATA ### SEGO.0000 SQ.FT. XMRP = 1109.0 ### SIO0 IN. YMRP = 375.0 ### SIO0 IN. SIO0 I	1/242			53	DY .03727 .03280 00226	.28	DY 01357 .06365	. 28	DY .09566 .05812 01569	8.	07 .05260 .04924 00141	.28	07 .06429 .13076 .02818	. 28	05093 .05093 .07529
### REFERENCE DATA = 2690.0000 SO.FT. XMRP = 1109. +74.8100 IN. XMRP = 375. 0125		ZZZ	ZZZ	RN/L =	0x 9.93909 9.89734 02111		0x 9.84159 9.91158 .02881		DX 9.83260 9.91415 .03409		0x 9.79538 9.85045 .02312		DX 9.88695 9.82664 •.02556	n	0.99054 9.89004 03988
REFERENCE DA REFERENCE DA REFERENCE DA REFERENCE DA REFERENCE DA RAPHAC MA RAPHAC	ARC	1109.	= 1109. = 375.	291/0	ALPHA0 10.34390 12.41160 1.04555	. 292/	ALPHAO 10.16860 12.43630 .93338	. 293/	AL PHAO 10.13820 12.34200 .92115	. 2947	ALPHAO 10.25250 12.45730 .92581	. 2957	ALPHAO 10.13030 12.41470 .96844	/962	ALPHAO 10.07900 12.54340 .97795
2 2590 2 44 2 3 2 44 3 5 3 7 41 3 7 41 3 7 41 3 8 6 8 6 6 8 6 6 8 6 6 8 6 6 8 6 6 8 6 6 8 6 6 8 6 6 8 6 6 8 6 6 8 6 6 8 6 6 8	ICE DATA	_	NCE DATA 1. YMRF 1. ZMRF 1. ZMRF		MACH .58846 .58807 00020	RUN NO	MACH .58779 .58837 .00024	RUN NO	MACH .58818 .58829 .00005	RUN NO	MACH .58847 .58839 00003		MACH .58898 .58942 .00019		MACH .58684 .58697 .00005
274 .616 .037 .105 .105 .105 .105 .105 .105 .105	REFEREN		MEFEREN 2690.0000 SC 474.8100 IN 936.6800 IN		ALPHAC 2.465 4.442 GRADIENT		ALPHAC 2.057 4.486 GRADIENT		ALPHAC 2.020 4.412 GRADIENT		ALPHAC 2.128 4.510 GRADIENT		AL PHAC 2.087 4.446 GRADIENT		AL PHAC 2.027 4.547 GRADIENT
O 2 th to	ı	H H H H	N 11 N	N tal	DZ 7.274 7.616		02 10.037 10.105		02 15.073 14.864		02 30.231 29.953		02 44,559 45.001		50.108 50.709

173	. 27	-	5.000 .000 .600		CBL 00225 00250 00013		CBL -, 00231 -, 00281 -, 00020		CBL 00223 00288 00029		CBL 00239 00214 .00010		CBL 00238 00225		CBL 00236 00216 .00008
PAGE	(21 OCT	DATA	STAB # ELEVON # DX # MACH #		CYN .00001 00044 00023		CYN 00007 00063 00022		CYN 00019 00064		CYN 00040 00112 00027		CYN 00067 00117 00021		CYN 00048 00124 00032
	(CNH030)	PARAMETRIC D	000.8		.00769 .00816 .00025		. 00775 . 00809 . 00014		CY .00753 .00817 .00028		CY .007 33 .00916 .00070		.00715 .00897 .00078		CY .00747 .00912 .00070
		D.	BETA = RUDDER = 10RB = DY	5.00	CLM .04287 .04592 .00162	5.00	.04164 .04502 .00137	5.00	CLM .04013 .04401 .00171	/ 5.00	CL:1 . 04006 . 04328 . 00123	2.00	CLM .04092 .04343 .00108	00.5 /	CLM .04105 .04340 .00100
	(ORBITER DATA)		80 K C	AL = -5.00/	. 06709 . 08587 . 00999	AL = -5.00/	co . 06622 . 08820 . 00888	AL = -5.00	CD . 06773 . 08864 . 00922	AL = -5.00/	CD .06822 .09737	AL = -5.00/	CD .07095 .09819	/AL = -5.00	.07119 .10167 .01298
	0351			GRADIENT INTERVAL	CL .38532 .45461 .03686	GRADIENT INTERVAL	CL .38844 .46508 .03098	GRADIENT INTERVAL	CL .39315 .46825 .03311	GRADIENT INTERVA	CL .39523 .50428 .04170	GRADIENT INTERVAL	CL .40972 .50479 .04076	GRADIENT INTERVAL	CL ,40878 ,52319 ,04872
ø	1747/1 ATI			3.28 GRAD	DY .03398 .03786	3.28 GP.AD	DY .04975 .02053 01181	3.28 GRAC	07 .03141 .02009 00499	3.28 GRA	04308 .04308 .09516	3.29 GRA	07 .06580 .097 <i>27</i> .01349	3.30 GRA	DY 00602 .08025 .03673
DATA - CA238	1' 20 (CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L * 3	0X 19.88150 19.89100	RN/L =	0X 19.84880 19.90010 4.020.	FRV1	0X 19.84270 19.92050	RN/L =	0X 19.88270 19.93250	RN/L =	DX 19.86300 19.85900 00171	RN/L =	DX 19.92850 19.89900 01255
TABULATED SOURCE	ARC		= 1109.00 = .00 = .375.00	301/0	ALPHA0 10.34670 12.31920 1.04919	302/ 0	ALPHAO 10.13010 12.43730	303/ 0	ALPHAO 10.26770 12.34570 .91607	304/0	ALPHAO 10.05950 12.46590	305/0	ALPHAO 10.15970 12.35030	. 306/ 0	ALPHAO 10.15600 12.37800 .94608
TABULA		DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH .5857 <i>2</i> .58623 .00027	RUN NO.	MACH .58701 .58644 00023	RUN NO.	MACH .58581 .58686 .00046	RUN NO	MACH .58823 .58519	RUN NO	MACH .58767 .59708	RUN NO	MACH .58729 .58775
73		REFERENCE DATA	2690.0000 SQ.F' 474.8100 IN. 936.6800 IN.		ALPHAC 2.474 4.355 GRADIENT		ALPHAC 2.021 4.495 GRADIENT		ALPHAC 2.172 4.441 GRADIENT		ALPHAC 1.934 4.549 GRADIENT		ALPHAC 2.080 4.413 GRADJENT		ALPHAC 2.067 4.416 GRAD;ENT
DATE 22 MAR 73			SREF = 26 LREF = 4 BREF = 9 SCALE =		02 7.146 7.541		02 10.020 10.077		DZ 14.887 14.608		DZ 30.123 29.781		DZ 44.889 44.724		02 50.425 50.408

ORIGINAL PAGE IS

TABULATED SOURCE DATA - CA238

ARC 14-120(CA238) 747/1 AT1 03S1 (ORBITER DATA)

(CNH031) (21 OCT 75)

PAGE 174

ָ כ	5.000 .000 20.000 .600		CBL 00192 00243		CBL 00202 00245 00017		CBL 00194 00267 00028		CBL 00226 00225		CBL 00211 00253 00017		CBL -,00218 -,00245 -,00011
17 (E1 0C)	STA DX MAC		CYN .00015 00006		CYN .00007 00010		CYN .00006 00002		CYN 00017 00048 00014		CYN 00024 00046		CYN 00025 00056
T DAMETER C	000.9		CY .00712 .00707		CY .00716 .00713 00001		CY .00709 .00743		CY .00727 .00652		CY .00671 .00733		CY .00647 .00691
	BETA = RUDDER = 10RB = DY	00/ 5.00	CLM .03113 .03918 .00416	00/ 5.00	CLM . 02975 . 03910 . 00365	0/ 5.00	CLM . 02932 . 03843 . 00355	0/ 5.00	CLM . 03059 . 03958	3/ 5.00	CLM .03081 .04134 .00439	5.00	CLM .03109 .04137 .00434
		.5.	CD .05164 .06194 .00532	ii iv	CD .05097 .06390	- = -5.0	00 . 05155 . 06419 . 00493	/AL = -5.00,	CD . 05319 . 06586 . 00555	/AL = -5.00	CD . 05368 . 06895 . 00636	/AL = -5.00,	CD . 054 32 . 06921 . 00629
		GRADIENT INTERVAL	CL .28708 .34350 .02916	RADIENT INTERVAL	CL .28961 .35390 .02511	GRADIENT INTERVAL	CL . 29248 . 35787 . 02551	GRADIENT INTERVAL	CL .29951 .36914 .03054	RADIENT INTERVAL	CL .30088 .38621 .03556	GRADIENT INTERVAL	CL .30402 .38617 .03469
		3.29 GRA	07 .05947 .09448 .01809	3.29 GAA	DY . 06734 . 05123 00629	3.30 GRA	07 -07407 -01904 	3.29 GRAD	70 .07184 .06091 0479	3.29 G3AE	DY .09661 .06355 01378	3.29 GRAD	07 - 01577 - 02241 - 00280
	0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	0X 19.87130 19.92830 .02947	RN/L =	0x 19.90690 19.96030 .02086	RN/L =	DX 19.86250 19.96860	RN/L =	DX 19.93210 19.97520	RN/L *	0x 19.92050 19.89040 01254	RN/L	DX 20.01850 19.99160 01136
	1109.	. 311/ 0	ALPHAO 8.31512 10.27020 1.01066	. 312/ 0	ALPHAO 8.07854 10.45100	313/ 0	ALPHAO B.08+32 10.40250	. 314/ 0	ALPHAO 8.07297 10.17670	315/0	ALPHAO 8.03821 10.28860	316/ 0	ALPHAO 8.08618 10.27800 .92546
CE DATA	50.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	MACH .58609 .58715 .00054	RUN NO.	MACH .58702 .58632 00027	RUN NO	мАСН .58709 .58711 .00001	RUN NO.	MACH .58708 .58717 .00304	RUN NO.	мACH .58721 .58697 00014	RUN NO.	MACH .58699 .58709 .00004
REFERENCE	2690.0000 50. 474.8100 IN. 936.6800 IN.		ALPHAC 2.440 4.374 GRADIENT		AL PHAC 1.989 4.549 GRADIENT		ALPHAC 1.961 4.524 GRADIENT		ALPHAC 1.982 4.262 GRADIENT		ALPHAC 1.970 4.370 GRADIENT		ALPHAC 2.003 4.371 GRAD:ENT
	SREF = 6 LREF = 8 BREF = SCALE =		DZ 7.139 7.034		9.707 9.890		02 14.857 14.654		02 29.665 29.802		DZ 44.676 44.732		02 50.207 50.098

175	15)		5.000 .000 .600		CBL 00421 00691 00139		CBL 00389 00586 00082		CBL 00361 00560 00083		CBL 00362 00526 00075		CBL 00302 00407 00045		CBL 00261 00329 00029
PAGE	(21 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN 00184 00274 00046		CYN 00132 00210 00033		CYN 00113 00225 00047		CYN 00108 00206 00044		CYN 00063 00128 00028		CYN 00068 00112 00018
	(CNH032)	PARAMETRIC D	000. 000. 000. 000. 000.		CY .00677 .00695		CY .00613 .00557 00024		CY .00647 .00523 00052		CY .00542 .00542 .00042		CY .00679 .00638 00018		CY .00634 .00622 00005
		•	BETA = RUDDER = 10RB = DY	/ 5.00	CLM .04600 .05663 .00548	0/ 5.00	CLM . 04087 . 05134 . 00440	17 5.00	CLM . 03983 . 05030 . 00439	00.5 /0	CLM . 03911 . 04911 . 00454	0/ 5.00	CLM .03635 .04723 .00468	00/ 5.00	CLM .03447 .04550 .00466
	TER DATA			NL = -5.00/	CD .04784 .05765 .00506	0'5- = -	CD . 04850 . 05995 . 00481	AL = -5.00.	CD . 04926 . 06013 . 00455	AL = -5.00/	CD . 05037 . 06120 . 00492	-5.0	CD . 05230 . 06587 . 00584	5.	CD . 05321 . 06668 . 00654
	1 03S1 (ORBITER			GRADIENT INTERVAL	CL . 28568 . 34156 . 02880	CRADIENT INTERVAL	ct .29165 .35310 .02581	GRADIENT INTERVAL	Ct. .29022 .35042 .02522	GRADIENT INTERVAL	CL . 29550 . 35670 . 02782	GRADIENT INTERVAL	CL .29942 .37419 .03216	GRADIENT INTERVAL	CL .30031 .38565 .03606
œ	1 747/1 ATI			3.30 GRAD	DY 10.15720 10.05880 05071	3.30 CRAD	DY 10.15740 10.16020 .00118	3.30 GRAD	DY 10.08520 10.13390 .02040	3.30 GRAD	0Y 10.14070 10.08630 02473	3.30 GRAC	DY 10.15200 10.08960 02683	3.30 GRAD	DY 10.12630 10.14780 .00908
DATA - CA23B	14-120(CA23B		0000 IN. XO 0000 IN. YO	RN/L = 3	DX 07736 08334 00309	RN/L = 3	0x 11409 03860 .03171	RN/L =	0x 16247 02661 .05691	RN/L =	.19638 19638 07071	RN/L =	DX 18575 12371 02668	RN/L =	0X 07292 12245 02093
TABULATED SOURCE	ARC		1109.00 1 .00 1 .375.00	321/0	ALPHAO 8.24764 10.25180 1.03284	322/ 0	ALPHAO 8.08363 10.31420	323/ 0	ALPHAO 8.10072 10.27970 .91286	324/0	ALPHAO 8.18816 10.19140	. 325/ 0	ALPHAO 8.07435 10.22550 92555	. 326/ 0	ALPH40 8.02243 10.27170
TABULA		DATA	.FT. XMRP YMRP ZMRP	RUN NO.	MACH .58661 .58746 .00044	RUN NO.	MACH .58731 .58718 00005	RUN NO.	MACH .58740 .58733	RUN NO	MACH .58735 .58780 .00021	RCN NO	MACH .58747 .58772	RUN NO	MACH .58755 .58817 .00026
IR 76		REFERENCE DATA	2690.0000 SQ.19474.8100 IN. 974.8100 IN. 936.6800 IN.		ALPHAC 2.384 4.324 GRADIENT		ALPHAC 1.999 4.379 GRADIENT		ALPHAC 1.980 4.367 GRADIENT		ALPHAC 2.0%9 4.2%8 GRADIENT		ALPHAC 1.976 4.301 GRADIENT		ALPHAC 1.958 4.325 GRADIENT
DATE 22 MAR 76			SREF # 6 LREF # 6 BREF # SCALE #		02 3.217 3.310		02 7.247 7.563		DZ 10.032 9.896		02 15.217 15.047		02 29.998 29.890		20 24.648 24.989

TABULATED SOURCE DATA - CA23B

		5.000		CBL 00273 00306 00015	I 75 1		5.000 .000 .000 .000		CBL 00518 00741 00121		CBL 00427 00652 00093		CBL 00412 00568 00065		CBL 00322 00339
	DATA	STAB = ELEVON = DX MACH =		CYN - 00060 - 00101 - 00018	3) (21 007	DATA	STAB = ELEVON = DX MACH =		CYN 00180 00238 00032		CYN 00147 00230 00034		CYN 00133 00224 00038		CYN 00092 00217 00052
(CNH032	PARAMETRIC			CY .00663 .00631 00014	(CNH033)	PARAMETRIC	.000 .000 8.000		CY .00569 .00540 00016		CY .00614 .00577 00015		CY .00675 .00640 00015		CY .00732 .00757 .00010
		BETA # RUDDER # 10RB # DY	.00/ 5.00	CLM .03416 .04503			BETA RUDDER RIORB RUDDER RIDORB	00/ 5.00	CLM .05164 .05690 .00285	00/ 5.00	CLM .04940 .05540 .00248	00/ 5.00	CLM .04784 .05349 .06236	0/ 5.00	.04610 .05047 .00182
(ORBITER DATA)			- 5	CD . 05377 . 06896 . 00662	(ORBITER DATA)				. 08551 . 08568 . 01093	*	00 . 06413 . 08655 . 00928	" Š	. 01026	VAL = -5.00/	.06733 .09724 .01244
AT1 0351 (0R			GRADIENT INTERVAL	CL .30169 .38846 .03781	ATI 0351 (0R			GRADIENT INTERVAL	CL .39497 .46999 .04065	GRADIENT INTERVAL	CL .38869 .47119 .03416	GRADIENT INTERVAL	CL .38793 .47925 .03814	GRADIENT INTERVAL	.39764 .51001 .04674
1/247			3.30 GRA	DY 10.13660 10.15950 .00998	1/247			3.30 GRAD	DY 10.07820 10.09130	3.32 GRAD	DY 10.09230 10.08730 00207	3.31 GRAD	DY 10.12510 10.09060 01441	3.31 GRAD	04890 00.01480 00.07440 01061
14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	.02053 04478 01056	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	0X 06667 14319 04147	RN/L =	0x 22873 09624 .05486	RN/L =	DX 19577 10228 .03905	RN/L =	0X 19612 :5854 .01563
ARC		= 1109. = 375.	. 327/ 0	ALPHAO 8.02344 10.19110 .94453	ARC		1109.	. 331/ 0	ALPHAO 10.34440 12.27760 1.04761	. 332/ 0	ALPHAO 10.03580 12.24310 .91395	. 333/ 0	ALPHAO 10.03310 12.27130 .93488	. 334/ 0	ALPHAO 10.02860 :2.313:0 :95016
	E DATA	FT. XMRP YMRP ZMRP	RUN NO	MACH .58820 .58920 .00044		E DATA	YMRP ZMRP	NON NO	MACH . 58922 . 58876 00025	PUN NO	MACH : 58952 : 58910 - : 00017	RUN NO	MACH .58891 .58912	RUN NO	MACH .58943 .58988
	REFERENCE DAT	2690.0000 SO 474.8100 IN 936.6800 IN		ALPHAC 1.969 4.264 GRADIENT		REFERENCE	2690.0000 50.1 474.8100 1N. 936.6800 1N.	٠	ALPHAC 2.446 4.292 GRADIENT		ALPHAC 1.907 4.322 GRAD!ENT		ALPHAC 1.933 4.327 GRADIENT		ALPHAC 1.958~ 4.362 GRADIENT
		SREF = LREF = BREF = SCALE =		02 49.978 50.1 63			SREF = LREF = BREF = SCALE =		DZ 7.500 7.613		02 10.263 9.859		02 15.012 14.957		02 29.834 29.957

177	1. 27		5.000 .000 .600		CBL 00285 00316 00013		CBL 00275 00296 00009	75)		5.000 .000 .000 .600		CBL 00184 00187 00226 00009		CBL 00196 00209 00268 00016
PAGE	(21 OCT	DATA	STAB * ELEVON * DX *		CYN 00111 00176 00027		CYN 00093 00153 00026) (21 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN 00053 00058 00070		CYN 00050 00031 00057
	(CNH033)	PARAMETRIC (.000 .000 .000 10.000		CY .00704 .00844 .00058		CY .00730 .00865	(大学 OHNO)	PARAMETRIC	.000 .000 6.000		CY .01030 .00987 .00978		. 00874 . 00940 . 00910
		•	BETA = RUDDER = 10RB = DY	00.5 /0	CLM .04451 .04840 .00162	0/ 5.00	CLM .04386 .04743 .00152		-	BETA = RUDDER = 10RB = DY	0/ 5.00	CLM .03953 .05106 .06112	.00/ 5.00	CLM .03872 .04957 .05982
	(ORBITER DATA)			/AL = -5.00/	CD .06814 .09902 .01283	/AL = -5.00/	CD .06824 .09911	(ORBITER DATA)			-5.0	CD .04057 .04671 .05691	e.	CD . 04092 . 04690 . 05802
	0351			GRADIENT INTERVAL	CL .39959 .51609 .04841	GRADIENT INTERVAL	CL .39899 .51696 .05025	AT1 0351 (OR			GRADIENT INTERVAL	CL .21432 .32834 .02655	GRADIENT INTERVAL	CL . 22552 . 27436 . 33442 . 02416
88	3) 747/1 ATI			3.30 GRA[DY 10.09900 10.09270 00262	3.30 GRA	DY 10.11940 10.08420 01500	1/247			3.31 GRA	07 .00578 .02682 00171	3.31 GRA	07 00757 06245 00326
DATA - CA238	14-120(CA23B)		0000 IN. X0 0000 IN. Y0 0000 IN. Z0	RN/L =	0X 17406 20324 01213	RN/L =	0x 10542 17171 02824	14-120(CA23B)		00000 IN. XO 00000 IN. YO	RN/L =	0X 06742 04621 02054	RN/L =	0713 - 10713 - 14690 - 04005 10810
TED SOURCE	ARC		1109.0 10.0 10.0	335/ 0	ALPHAO 9.93220 12.24790	336/ 0	ALPHAO 9.94862 12.23090 .97225	ARC		911 • 1109 · · · · 375	. 341/ 0	ALPHAO 5.90309 8.09199 10.13540	. 342/ 0	ALPHAO 6.04215 8.16733 10.29310
TABULATED		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .58683 .58661	RUN NO.	масн . 58788 . 58739 00021		CE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	MACH .58648 .58717 .59774	RUN NO	MACH .58815 .58765 .58723
A 76		REFERENCE DATA	2690.0000 SQ.F 474.8100 IN. 936.6800 IN.		ALPHAC 1.871 4.278 GRADIENT		ALPHAC 1.913 4.260 GRADIENT		REFERENCE DATA	2690.0000 SQ. 474.8100 IN. 936.6800 IN.		ALPHAC 031 2.265 4.259 GRADIENT		ALPHAC 127 2.324 4.353 GRADIENT
DATE 22 MAR			SREF = 2 LREF = BREF = SCALE =		02 44.819 45.000		50.002 50.443			SREF = 2 LREF = BREF = SCALE =		02 1.515 1.466 1.364		5.218 2.877 3.380

TABULATED SOURCE DATA - CA23B

, 57		5.000 .000 .600		CBL 00227 00229 00270		CBL 00244 00234 00284 00008		CBL 00239 00246 00273		CBL 00273 00261 00283		CBL 00269 00263 00245
. 50 15)	DATA	STAB		CYN 00047 00052 00062		CYN 00052 00072		CYN 00056 00060 00062		CYN 00056 00049 00102		CYN 00080 00071 00102
(CNH034)	PARAMETRIC D	. 000. 6.000.		CY .00905 .00862 .00855		CY .00873 .00859 .00845		CY .00858 .00860 .00854 00001		. 00880 . 00878 . 00821 00012		.00784 .00807 .00782
	_	BETA # RUDDER # 10RB # DY #	5.00	CLM .03297 .04467 .05466	5.00	CLM .03071 .04267 .05312	5.00	. 02715 . 03965 . 05015	5.00	CLM . 02395 . 04759 . 00524	5.00	CLM . 02276 . 03694 . 04643
(ORBITER DATA)			AL = -5.00/	.04106 .04809 .05792	/AL = -5.00/		'AL = -5.00/	00 .04917 .06058 .0016	AL = -5.00/	.04316 .05229 .05469	AL = -5.00/	.05348 .05372 .05765 .06765
AT1 03S1 (ORE			GRADIENT INTERVAL	. 22384 . 28297 . 33660 . 02494	GRADIENT INTERVAL	CL . 22465 . 28357 . 34570 . 02670	GRADIENT INTERVAL	Cl . 2224 1 . 2867 1 . 35060 . 02827	GRADIENT INTERVAL	CL .22355 .30197 .37140	GRADIENT INTERVAL	CL . 22227 . 30628 . 38674 . 03614
1/247			3.30 GRAE	07 02328 04725 00478	3.30 GRAC	DY 02468 03964 06921	3.30 GRAD	DY 04966 05815 07945	3.29 GRAC	07 00339 04821 10290	3.30 GRAD	DY 05370 05628 .01683
14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	0x -,13205 -,07014 -,00640	FN/L =	DX 13020 05279 05789	RN/L =	0x 11810 .06055 07864	FN/L =	0x - 08203 - 02282 - 09565 - 00039	RN/L =	DX 00966 13594 15327 03264
ARC		= 1109.0 : 375.0	343/ 0	ALPHAO 5.90381 8.21305 10.11280	344/ 0	ALPHAO 5.93582 8.23296 10.19170	345/ 0	ALPHAO 5.91142 8.21363 10.17930	346/ 0	ALPHAO 5.88621 8.27416 10.18430	347/ 0	ALPHAO 5.90152 8.25624 10.22080
	E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .58717 .58697 .58774	RUN NO.	MACH .58774 .58683 .58677 00022	PUN NO.	MACH .58763 .58572 .58738	RUN NO.	MACH .58604 .58747 .58710	RUN NO.	MACH .58716 .58716 .5875
	REFERENCE DATA	2690.0000 SQ.P 474.8100 IN. 936.6800 IN.		ALPHAC - 285 2.312 4.212 GRADIENT		ALPHAC 243 2.334 4.253 GRADIENT		AL PHAC 254 2.332 4.248 GRADIENT		ALPHAC 267 2.360 4.268 GRADIENT		ALPHAC 235 2.345 4.291 GRADIENT
		SREF # 6 LREF # 6 BREF # SCALE #		DZ 7.400 7.390 7.046	-	D2 9.858 9.870 9.840		DZ 14.745 14.663 14.715		02 29.743 29.911 79.65		DZ 44.607 44.784 44.631

PAGE 178

179	15 1		5.000 .000 .000 .600		CBL 00233 00259 00268 00008		CBL 00225 00248 00214	15)		5.000 .000 .000 .600		CBL 00204 00193 00197		CBL 00217 00201 00207
PAGE) (21 OCT	DATA	STAB ELEVON DX DX MACH =		CYN 00065 00066 00086		CYN 00056 00070 00083	5) (21 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN 00010 00012 +.00016		CYN 00003 00001 00024 00004
	(CNH034)	PARAMETR1C			. 00780 . 00797 . 00830		.00777 .00778 .00778 .00776	(CNH035)	PARAMETRIC	0000.		. 00754 . 00754 . 00675 00019		.00755 .00691 .00617
		•	BETA RRUDOER R 10RB R DY	7 5.00	CLM .02213 .03673 .04610 .00533	1/ 5.00	. 02170 . 03605 . 04490 . 00512			BETA # RUDDER # 10RB # DY	00/ 5.00	CLM .02793 .03472 .04348	00/ 5.00	CLM .02283 .03020 .03896
	TER DATA			AL = -5.00,	.04386 .04386 .05396 .06820	AL = -5.00/	CD . 04405 . 05439 . 06965 . 00555	(ORBITER DATA)			* -5.	CD .03597 .03882 .04474 .00205	5.	. 03575 . 03971 . 04604 . 00201
	1 03S1 CORBITER			GRADIENT INTERVAL	.21847 .30921 .38849 .03755	GRADIENT INTERVAL	CL .21722 .31168 .39577 .03909	0351			GRADIENT INTERVAL	CL 11446 17421 23506 02841	GRADIENT INTERVAL	CL . 12359 . 18594 . 24321 . 02646
8	1747/1 AT1			3.30 GRAD	01479 .01479 02815 05749	3.31 GRAD	07 13288 .00830 09148	1 747/1 AT			3.30 GRA	07 .05360 .12459 .01675	3.29 GRA	04314 .0432 .06432 .07605
DATA - CA23B	14-120(CA23B)		0000 IN. XO 0000 IN. YO	RN/L = 3	DX .08819 .16437 .16269 .05808	EN/L =	0x 11708 -172556 -16063 -05384	(85647)051-4!		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	0X 07524 03598 04991 .00625	RN/L =	X0 42881 48789 48489
TED SOURCE	ARC		1109.0 .0 = 375.0	348/ 0	ALPHAO 5.88468 8.25858 10.19200	349/0	ALPHAO 5.85348 B.18336 10.20200	ΔA		1109.	. 351/0	ALPHAO 3.99746 6.14693 8.16058	. 352/ 0	ALPHAO 4.00651 6.30510 8.22000
TABULATED		DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH .58785 .58817 .58761 00004	RUN NO.	MACH .58759 .58818 .58756		F DATA	FT. XMRP YMRP ZMRP	RUN NO	MACH . 58697 . 58780 . 58795	RUN NO	МАСН . 58702 . 58736 . 58712 . 00003
MAR 76		REFERENCE DATA	2690.0000 SQ.F 474.8100 IN. 936.6800 IN.		ALPHAC 239 2.361 4.269 GRADIENT		AL PHAC 279 2 . 289 4 . 275 GRADIENT		DEFERENCE DATA	2690.0000 SQ. 474.8100 IN. 936.6800 IN.		ALPHAC .007 2.270 4.244 GRADIENT		AL PHAC 212 2 . 387 4 . 282 GRADIENT
DATE 22 M			SREF LPEF BREF SCALE		02 49.960 50.084 50.051		02 61.655 61.629 61.640			SREF LREF BREF SCALE		02 3,392 3,273 3,233		DZ 7.633 7.582 7.362

TABULATED SOURCE DATA - CA23B

180 (21 OCT 75 PAGE PARAMETRIC DATA (CNH035) 747/1 AT1 03S1 (ORBITER DATA) ARC 14-120(CA23B) 1109.0000 IN. XO .0000 IN. YO 375.0000 IN. ZO XMRP YMRP ZMRP REFERENCE DATA SREF LREF BREF SCALE

CBL -.00212 -.00222 -.00002 CBL -.00239 -.00231 -.00214 CBL -.00236 -.00236 -.00226 CBL -.00226 -.00230 -.00246 -.00004 5.000 .000 .000 .600 CYN .00004 .00010 -.00009 CYN -.00002 -.00009 -.00009 CYN -.00016 -.00013 -.00037 CYN -.00037 -.00044 -.00058 STAB ELEVON DX MACH .00723 .00690 .00648 .00609 .00543 .00548 -.00014 CY .00728 .00653 .00643 -.00019 .00668 .00645 .00587 -.00017 0000. CLM .01416 .02378 .03522 .00456 CLM .020**65** .02823 .03780 CLM .01758 .02599 .03594 .00397 CLM .01315 .02258 .03397 .00454 5.00 5.00 BETA RUDDER 10RB DY 5.00 5.00 -5.00/ GRADIENT INTERVAL = -5.007 GRADIENT INTERVAL = -5.00/ -5.007 CD .03675 .04006 .04658 CD .03750 .04118 .04797 CD .03875 .04387 .05163 CD .03949 .04542 .05371 GRADIENT INTERVAL = GRADIENT INTERVAL CL .12407 .19182 .25062 .02823 CL .12746 .19579 .25789 CL .12538 .20908 .27759 .03326 CL .12679 .21326 .28953 .03577 . 04406 . 08345 . 00995 - . 00631 .11144 .06173 .09580 -.0042E . 08920 . 05612 . 07042 - . 00459 DY .09655 .04817 .00496 3.29 3.29 3.29 3.30 -.11309 -.11618 -.02549 DX -.18325 -.05927 -.07338 -.06585 -.11845 -.17999 . 14780 - . 19731 - . 05989 FN/L = RN/L # RN/L = WAYL = ă ALPHAO 3.95156 6.21534 8.18827 .94488 ALPHAO 3.94923 6.21535 8.22508 .93174 ALPHAO 3.91348 6.26241 8.23413 353/ 0 ALPHAD 3.85960 6.23703 8.20431 354/0 355/ 0 356/0 RUN NO. RUN NO. RUN NO. RUN NO. MACH .58792 .58850 .58890 MACH .58769 .58803 .58849 MACH .58842 .58832 .58828 .00003 MACH .58946 .58900 .58907 .00009 2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN. ALPHAC -.272 2.346 4.294 GRADIENT ALPHAC -.270 2.324 4.304 6RADIENT ALPHAC -.213 2.313 4.259 GRADIENT ALPHAC -.271 2.322 4.260 6RADIENT D2 9.664 9.916 9.803 02 15.113 14.808 14.693 DZ 29.891 29.979 29.891 DZ 44.449 44.799 44.865

181	75)		5.000 .000 .000 .600		CBL 00223 00269		CBL 00221 00263 00018		CBL 00247 00294 00020		CBL 00241 00279 00016		CBL 00238 00288		CBL 00264 00300 00016
PAGE	(21 OCT	DATA	STAB # ELEVON = DX # MACH #		CYN 00065 00060		CYN 00055 00044 .00004		CYN 00020 00047 00011		CYN 00007 00057		CYN 00021 00053 00014		CYN 00041 00063
	(CNH03E)	PARAMETRIC [000.01		CY .00937 .00906 00016		CY .00873 .00924 .00022		CY .00927 .00915		CY .00932 .00854 00032		CY .00915 .00877 00016		CY .00854 .00084
		_	BETA = RUDDER = 10RB = DY	/ 5.00	CLM . 04960 . 05892 . 00493	1/ 5.00	CLM .04786 .05813	00.5 /	CLM .04322 .05316 .00421	00.5 /0	CLM . 04064 . 05139 . 00447	00/ 2.00	CLM .03858 .04933	0/ 5.00	CLM .03685 .04638 .00423
	TER DATA			AL = -5.00,	CD . 04845 . 05925 . 00571	AL = -5.00/	CD . 050 4 . 009854 . 009885	AL = -5.00,	.04963 .06111 .06186	AL = -5.00	. 05015 . 05015 . 06287 . 00528	ا بن	. 05119 . 05411 . 00541	/AL = -5.00,	CD .05390 .06853 .00650
	1 0351 CORBITER			GRADIENT INTERVAL	CL .27620 .33466 .03090	GRADIENT INTERVAL	CL .27902 .34033 .02563	GRADIENT INTERVAL	CL .29090 .34881 .02451	GRADIENT INTERVAL	CL . 29125 . 35762 . 02756	GRADIENT INTERVA	CL . 29493 . 36470 . 02935	GRADIENT INTERVA	.31089 .38518 .03344
gg	11 747 I			3.32 GRAD	07 .21706 .21141 00299	3.31 (.RAD	DY .16706 .17088	3.30 GRAD	DY .22780 .18695 01729	3.30 GRAD	DY .21021 .16889 01716	3.29 (.RAD	0Y .20236 .12947 03066	3.29 GRA[07 .17624 .11332 02795
DATA - CA23B	14-120(CA23B)		000 IN. XO 000 IN. YO 000 IN. ZO	RN/L =	DX 03672 16900 06991	RN/L =	0x 10843 07058 01582	RN/L =	0x -,10956 .01898	RN/L =	0x 11920 04720	WN/L =	0x 09596 02118	RN/L =	02 - 17520 - 14877 - 17110.
TABULATED SOURCE	ARC		1;09.000 0000 375.000	361/ 0	ALPHAO 8.14588 10.19350 1.09483	. 362/ 0	ALPHAO 8.04539 10.31600	363/0	ALPHAO 8.11744 10.25970	354/0	ALPHAO 8.14182 10.39920	. 355/ 0	8.15559 6.35559 10.35559	355/ 0	8.24139 10.35100 93709
TABULA		E DATA	KT. XMRP YMRP ZMRP	RUN NO.	MACH .58711 .58755 .00023	RUN NO.	MACH .58735 .58653 00034	RUN NO	MACH .58735 .58622 00048	RUN NO	MACH . 58585 . 58629 . 00018	NUN NO	MACH .58585 .58527 00025	RUN NO	MACH . \$8550 . 58504 00020
MAR 76		REFERENCE DATA	2690.0000 50.R 474.8100 1N. 936.6800 1N.		ALPHAC 2.302 4.194 GRADIENT		ALPHAC 2.012 4.405 GRADIENT		ALPHAC 2.013 4.376 GRADIENT		ALPHAC 2.049 4.457 GRADIENT		ALPHAC 2.097 4.474 GRAD IENT		ALPHAC 2.159 4.411 GRADIENT
DATE 22 MA			SREF = 6 LREF = 8 BREF = SCALE = 5		02 1.654 2.469		02 2.877 3.365		02 7.393 7.226		02 9.858 10.104		02 14.553 14.643		02 29.819 29.992

CA23B
t
DATA
SOURCE
TABULATED

PAGE 182	(CNH036) (21 OCT 75)
	ARC 14-120(CA23B) 747/1 ATI 0351 (ORBITER DATA)
TABULATED SOURCE DATA - CA23B	ARC 14-120(CA23B)
MAR 76	;

	5.000 .000 .000 .600		CBL -, 00250 -, 00272 -, 00009		CBL 00237 00270 00013		CBL 00253 00262 00004	(57)		-1.000 .000 .000 .600		CBL 00185 00214 00229
DATA	STAB = ELEVON = DX = MACH =		CYN 00043 00064		CYN 00028 00090		CYN 00026 00062 00016	7) (21 OCT	DATA	STAB ** ELEVON ** DX ** MACH **		CYN 00023 00047 00054
PARAME TR 1C	. 000 10.000 6.000		CY .00843 .00887		CY .00836 .00860		CY .00811 .00858	(CNH037)	PARAME TR I C	.000 .000 6.000		CY .00794 .00763 .00826
	BETA = RUDDER = 10RB = DY	0/ 5.00	CLM . 03415 . 04493 . 00465	0/ 5.00	CLM .03278 .04452 .00484	0/ 5.00	CLM .03427 .04310 .00388		_	BETA = RUDDER = IORB = DY	0/ 5.00	CLM .04124 .05128 .06093
		VAL = -5.00/	00 .05542 .070 96 .00666	VAL = -5.00/	00 .05523 .07266	VAL = -5.00/	CD .05677 .07308 .00716	(ORBITER DATA)			/AL = -5.00/	.04173 .04197 .05826 .00435
		GRADIENT INTERVAL	CL .30926 .39619 .03749	CRADIENT INTERVAL	CL .30470 .40637 .04194	GRADIENT INTERVAL	CL .32048 .40517 .03720	AT1 03S1 (OR			GRADIENT INTERVAL	CL .22703 .23758 .33353 .02791
		3.29 GRA	DY .16956 .15247 00737	3.30 CRA	DY .16630 .15838 00327	3.30 . GRA	07 .13774 .12725 00461	747/1			3.33 GRA	09365 .09365 .06646 .05405
	9.0000 IN. XO .0000 IN. YO 5.0000 IN. ZO	RN/L =	0x 12614 09769	RN/L =	.04310 04310 11005 02761	RN/L =	DX 02430 04193 00774	ARC 14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	DX 10766 12705 00527
	1109.	. 367/ 0	ALPHAO 8.16577 10.31880 .92837	. 368/ 0	ALPHAO 8.08551 10.37690	3697 0	ALPHAO 8.24539 10.35040 .92457	ARC		= 1109.0000 = .0000 = 375.0000	371/ 0	ALPHAO 5.33729 8.24052 10.27080 1.03052
E DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	MACH .58538 .58637 .00043	RUN NO.	MACH .58474 .58435 00016	RUN NO.	MACH .58502 .58414 00039		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .58987 .59307 .59389
REFERENCE DATA	2690.0000 SO. 474.8100 IN. 936.6800 IN.		ALPHAC 2.052 4.371 GRADIENT		ALPHAC 2.015 4.439 GRADIENT		ALPHAC 2.140 4.415 GRADIENT		REFERENCE DATA	2690.0030 SQ.FT 474.8100 IN. 936.6800 IN.		ALPHAC . 521 2.297 4.335 GRADIENT
	SREF # BREF # SCALE #		02 45.057 44.937		02 50.129 50.420		D2 62.057 61.853			SREF * : LREF = BREF = SCALE *		02 -955 -879 -932

183	. 57		-1.000 .000 .000 .600		CBL 00208 00215 00240		CBL 00226 00246 00289 00013		CBL 00222 00230 00290		CBL 00232 00246 00074 00009		CBL 00247 00247 000557
PAGE	(21 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN .00015 00028 00025 00009		CYN 00011 00008 00056 00009		CYN 00020 00024 00050		CYN 00012 00024 00077		CYN 00023 00066 00066
	(CNH037)	PARAMETRIC D	0000.0000.0000.00000.000000000000000000		CY . 00940 . 00844 . 00881 00014		. 00884 . 00893 . 00803 -, 00016		CY .00867 .00781 .00816		CY .00855 .00843 .00759		.00813 .00810 .00815
		_	BETA = RUDDER = 10RB = DY	00'5'	CLM .03841 .04954 .05926 .00468	7 5.00	. 03204 . 04527 . 05482	7 5.00	CLM .03035 .04239 .05323	1/ 5.00	CLM . 02813 . 03923 . 05029	00 2 70	CLM .02418 .03693 .04836
	ITER DATA)			AL = -5.00/	CD .04190 .04811 .05856	AL = -5.00,	CD .04143 .04933 .06017	AL = -5.00/	CD .04199 .04898 .06166	AL = -5.00/	. 04289 . 04977 . 06260	/AL = -5.00	CD . 044 15 . 05265 . 06831 . 00529
	O3S1 (ORBITER			GRADIENT INTERVAL	CL .22934 .27805 .33584 .02376	GRADIENT INTERVAL	CL .22502 .28920 .34817 .02685	GRADIENT INTERVAL	CL .23080 .28432 .35570 .02714	GRADIENT INTERVAL	CL .23588 .28601 .35913	GRADIENT INTERVAL	CL .23327 .29883 .38686 .03369
æ	1747/1 ATI			3.32 GRAD	. 16043 . 13546 . 12886 00723	3.32 GRAD	09567 . 12690 . 04585 00931	3.31 GRAD	09762 . 09762 . 12280 . 09804	3.31 GRAD	. 13141 . 06667 . 08480 01089	3.32 GRAD	0Y . 12231 . 11292 . 08067
DATA - CA23B	14-120(CA23B)		00000 17. XO 00000 17. XO 00000 17. XO 00000 17. XO	RN/L =	0x 14594 11055 .00163	RN/L *	0x 08660 05996 04563	RN/L =	DX -,12387 ,06698 -,06324	'nN/L #	DX 14126 05569 06647	RN/L =	0X 12939 02203 18963 01215
TABULATED SOURCE	ARC		= 1109.0 = .0 = 375.0	372/ 0	ALPHAO 6.14149 8.31124 10.30810	373/ 0	ALPHAO 5.97655 8.43460 10.32400	374/ 0	ALPHAO 6.09035 8.31062 10.42890	375/ 0	ALPHAO 6.22162 8.27672 10.39350	. 376/ 0	ALPHAO 6.11690 8.28595 10.47950
TABULA		DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH .59019 .59040 .59036	RUN NO.	MACH .58959 .58950 .58887 00015	RUN NO.	MACH .58840 .58937 .58833	RUN NO	. 58910 . 58974 . 59844 00014	ON NO	масн . 58885 . 58821 . 58919
۶ 76		REFERENCE DATA	2690.0000 SO.F 474.8100 IN. 935.6800 IN.		ALPHAC 073 2.415 4.372 GRADIENT		ALPHAC 184 2.515 4.353 GRADIENT		ALPHAC 096 2.401 4.474 GRADIENT		ALPHAC .035 2.374 4.458 GRADIENT		AL PHAC 037 2.359 4.506 GRADIENT
DATE 22 MAR			SREF = 26 LREF = 4 BREF = 9 SCALE = 9		3.611 3.412 3.341		02 7.238 7.611 7.497		DZ 10.003 9.942 10.030		02 14.990 14.729 14.795		02 29.795 29.929 30.138

Ĕ 184	175)		000.		CBL 00255 00261 00256		CBL 00244 00235 00236		CBL 00241 00247 00239	(57.1		5.000 5.000 .000 .600		CBL 00087 00098 00151 00015	
PAGE	7) (21 OCT	DATA	STA.3 = ELEVON = DX = MACH =		CYN 00041 00039 00078 00008		CYN 00037 00042 00101 00014		CYN 00059 00086 00086	1) (21 001	DATA	STAB = ELEVON = OX		CYN . 00083 . 00070 . 00068 00004	
	(CNH037)	PARAMETRIC			CY .00787 .00811 .00803		CY .00758 .00776 .00745		CY .00734 .00730 .00731 00001	CNH038	PARAME TRIC		,	. 00478 . 00478 . 00452 - 00006	
			BETA = RUDDER = IORB = DY =	0/ 5.00	CLM . 02145 . 03737 . 04535	0/ 5.00	CLM . 02270 . 03533 . 04578 . 00514	00/ 5.00	CLM . 02153 . 03454 . 04442			BETA REUDDER WE 10RB REUDDER WE DY	0/ 5.00	00114 00114 .01799	
	(ORBITER DATA)			*** = -5.00	CD . 04476 . 05521 . 06887 . 00542	VAL = -5.0	CD . 04564 . 05496 . 07197 . 00586	L = -5.	CD .04580 .05588 .07175	(ORBITER DATA)			VAL ≈ -5.00,	. 05265 . 05214 . 07787 . 00579	
	AT1 0351 (0F			GRADIENT INTERVAL	CL - 22242 - 31475 - 39070 - 03840	GRADIENT INTERVAL	CL .23819 .30917 .40389	GRADIENT INTERVA	CL . 23286 . 31321 . 40256	AT! 035! (0R			GRADIENT INTERVAL	CL .31166 .37096 .43733 .02892	
CA238	747/1			3.32 GR/	07474 . 07474 . 08694 . 12210	3.31 GRA	DY . 05409 . 13582 . 10327	3.31 GRA	DY . 12051 . 09946 . 09337 00622	1/247			3.34 GRA	. 08333 . 10096 . 08546 . 00058	
DATA -	14-120(CA23B)		0000 IN. YO 0000 IN. YO 0000 IN. ZO	RN/L =	04783 04783 09599 01614	RN/L =	DX 01251 24803 19505 04101	RN/L =	DX .14628 22930 20140	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	0X 16713 .04218 12686	
TABULATED SOURCE	ARC		1109.	. 377/ 0	ALPHAC 6.08589 8.42205 10.22770	. 378/ 0	ALPHAO 6.20814 8.27754 10.47610	. 379/ 0	ALPHAO 6.10612 8.32028 10.33570	ARC		# 1109.	. 381/ 0	ALPHAO 5.98392 8.13110 10.37170	
TABUL		CE DATA	FT. XMRP. YMRP. ZMRP	RUN NO.	MACH .58823 .58995 .58874 .00016	RUN NO	MACH .58791 .58759 .58783 00002	RUN NO	MACH .58735 .58707 .58790		E DATA	.FT. XMRP YMRP I. ZMRP	RGN NO	MACH .58938 .58924 .58902	
MAR 76		REFERENCE	2690.0000 SO. 474.8100 IN. 936.6800 IN.		ALPHAC 096 2.497 4.260 GRADIENT		ALPHAC .036 2.316 4.524 GRADIENT		ALPHAC 013 2.379 4.408 GRADIENT		REFERENCE	2690.0000 SO. 474.8100 IN. 935.6800 IN.		ALPHAC .046 2.293 4.387 GRAD:ENT	
DATE 22 M			SREF = BREF = SCALE =		02 45.027 44.952 44.914		02 50.481 50.592 50.369		02 61.632 61.965 61.651			SREF = 6 LREF = 6 BREF = SCALE =		02 1.603 1.569 2.306	

185	1 57		0000 0000 0000 0000		CBL 00194 00112 00152		CBL 00112 00137 00184 00016		CBL 00123 00146 00174 00011		CBL 00132 00156 00174		CBL 00144 00152 00174 00006
PAGE	(21 OCT	DATA	STAB E ELEVON B DX MACH B		. 00100 . 00101 . 00098		. 00107 . 00107 . 00107 . 00000		CYN .00122 .00126 .00113		CYN . 00122 . 00130 . 00128		. 00115 . 00115 . 00122 . 00001
	(CNH038)	PARAMETRIC D			CY .00470 .00473 .00478		CY .00424 .00446 .00415 00001		CY .00429 .00539 .00399 00007		CY . 00460 . 00436 . 00418 00099		CY .0042E .00382 .00404 00006
		α.	BETA REUDDER BIORB BOY	00.5 /	CLM 00189 .00720 .01573	00.5 /0	CLM 00849 .00202 .01009	0/ 5.00	CLM 01114 00068 .00774 .00425	00/ 5.00	CLM 01488 00247 .00570	00/ 2.00	CLM 01662 00464 .00295
	ITER DATA)			AL = -5.00/	. 05241 . 05241 . 07812 . 00579	AL = -5.00/	. 05315 . 06297 . 07976	/AL = -5.00,	CD . 05408 . 06426 . 08115	i rù	CD . 05365 . 06578 . 08237	, i	CD . 05482 . 06858 . 08693
	1 0351 CORBITER			GRADIENT INTERVAL	CL .32795 .37921 .44108 .02554	SRADIENT INTERVA	CL .33115 .38272 .45524 .02766	GRADIENT INTERVAL	CL .33349 .38797 .45945 .02823	GRADIENT INTERVAL	CL .32158 .39532 .46563	GRADIENT INTERVAL	CL .32803 .40780 .48254 .03359
œ	747/1 ATI			3.33 GRAD	07 . 10115 . 08959 . 05348	3.33 3RAD	06087 .08816 .09323 .00742	3.32 GRAD	DY .08783 .05753 .04705	3.32 GRAI	01465 .07175 .07290	3.32 GRA	09307 .09307 .06951 .04147
DATA - CA23B	14-120(CA23B)		0000 IN. XO	RN/L = 3	0x 19715 01894 08950	£N/L #		RN/L =	DX 23948 .02282 12841 02694	RN/L =	0X 12720 08175 05165	RN/L =	0x 11334 03463 16387
TABULATED SOURCE	ARC		# 1109.0(# 375.0	382/ 0	ALPHAC 6.20728 8.36194 10.37440	383/ 0	ALPHAO 6.18939 8.27053 10.35840	. 384/ 0	ALPHAO 6.26151 8.30010 10.44550	. 385/ 0	ALPHAO 6.06450 8.39330 10.36830	. 386/ 0	ALPHAO 6.01263 8.40355 10.40330
TABULA		E DATA	I.FT. XMRP I. YMRP I. ZMRP	RUN NO.	MACH .58937 .58831 .58815 00028	RUN NO.	MACH . 58823 . 58845 . 58629 00042	RUN NO	MACH .58749 .58687 .58640	RUN NO	MACH .58573 .58615 .58601	RUN NO	MACH 58674 58734 58719
MAR 76		REFERENCE DATA	2690.0000 SQ. 474.8100 IN. 936.6800 IN.		ALPHAC . 019 2.422 4.425 GRADIENT		ALPHAC 027 2 . 422 4 . 4 19 GRADIENT		ALPHAC . 047 2.409 4.489 GRAD 1 ENT		ALPHAC 141 2.495 4.418 GRADIENT		AL PHAC 165 2 . 497 4 . 402 GRAD I ENT
DATE 22 MAR			SREF = 26 LREF = 1 BREF = 1 SCALE = 1		02 3.468 3.699 3.469		DZ 7.736 6.902 7.339		02 10.309 9.703 10.031		02 15.037 14.866 14.876		02 30.004 29.816 30.280

(CNH038) (21 OCT 75)

ARC 14-120(CA23B) 747/1 ATI 03SI (ORBITER DATA)

	5.000 .000 .000		CBL 00!38 00158 00170		CBL 00157 00164 00170		CBL 00155 00161 00002	1 75)		5.000 .000 .600		CBL 00074 00111 00019
DATA	STAB # ELEVON # DX MACH #		CYN .00111 .00123 .00092		CYN .00084 .00109 .00109		CYN .00106 .00115	(08 007	DATA	STAB = ELEVON = DX = MACH =		CYN .00116 .00075
PARAMETRIC	. 000 . 000 . 000 .		CY .00410 .00410 .00329 00018		CY .00365 .00377 .00395		CY .00415 .00373 00016	(CNH039)	PARAMETRIC	.000 10.000 6.000		. 00491 . 00384 00057
	BETA # RUDDER = 10RB # DY =	.00/ 5.00	CLM 01682 00588 .00149	00/ 5.00	CLM 01774 00607 .00060	00 2 /0	CLM 01948 00750 .00453			BETA ** RUDDER ** 10RB ** DY **	0/ 5.00	CLM .02639 .03359 .00384
		* 5-	CD . 05680 . 07035 . 08958 . 00742	". .5.	CD . 05625 . 07082 . 08929	VAL = -5.00/	CD .05623 .07023 .00530	OZSI (ORBITER DATA)			VAL = -5,00/	. 08054 . 09540 . 00793
		GRADIENT INTERVAL	CL .33181 .41042 .49727 .03760	GRADIENT INTERVAL	CL .32644 .41671 .49599 .03897	GRADIENT INTERVAL	CL .31440 .41051 .03635	AT1 0251 (0R			GRADIENT INTERVAL	CL .36247 .42507 .03339
		3.31 GRA	04 .06776 .08432 .01982	3.30 GRA	. 11843 . 08470 . 09634 00569	3.30 GRA	DY .11916 .07553 01650	1/242			3.36 GRA	.05722 .05722 00654 03401
	00000 IN. YO 00000 IN. YO 00000 IN. ZO	RN/L =	0X 10694 06122 21870	RN/L ≈	. 11060 18012 17500 06945	RN/L =	. 12903 09098 08321	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	06687 04503 04503
	1109. 1 375.	. 387/ 0	ALPHAO 6.21183 8.42103 10.41200	. 388/ 0	AL PHAO 6.07965 8.42727 10.28530	. 389/ 0	ALPHAO 5.98804 8.29901 .87406	ARC		# 1109.00 .00. # 375.00	391/0	ALPHAO 8.22485 10.21090 1.05936
CE DATA	FT. XMRP. YMRP. ZMRP	RUN NO	MACH .58666 .58661 .58586 00018	PUN NO.	MACH . 58490 . 58441 . 58442 00012	RUN NO	MACH .58473 .58435 00014		E DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	MACH . 59047 . 59098 . 00027
REFERENCE DATA	2690.0000 SO.F1 474.8100 IN. 936.6800 IN.		ALPHAC .070 2.481 4.448 GRADIENT		ALPHAC 037 2.513 4.284 GRADIENT		AL PHAC 115 2 . 529 GRAD 1 ENT		REFERENCE DATA	2690.0000 SO. 474.8100 IN. 936.6800 IN.		ALPHAC 2.388 4.263 GRADIENT
	SREF # 6 LREF # 8 BREF # SCALE #		DZ 44.879 44.946 44.926		DZ 49.971 50.192 50.609		DZ 61.515 60.520			SREF = 2 LREF = BREF = SCALE =		02 3.148 3.390

187	. 75)		5.000 5.000 .000 .600		CBL 00095 00164 00029		CBL 00102 00137 00015		CBL 00102 00146 00019		CBL 00121 00158 00015		CBL 00134 00162 00013		CBL 00122 00142 0009
PAGE	1 08 OCT	DATA	STAB # ELEVON # DX # MACH #		CYN .00124 .00084 00017		CYN .00116 .00084 00013		.00111 .00085 00011		CYN .00101 .00068 00013		CYN .00094 .00072		CYN . 00094 . 00061
	(CNH039)	PARAMETRIC (. 000 10.000 6.000		.00500 .00522 .00009		.00459 .00452 .00003		.00422 .00451 .00013		.00378 .00402 .00010		CY .00369 .00435 .00030		CY .00345 .00363
		_	BETA ** RUDDER = 10RB = 0Y	0/ 5.00	CLM .02330 .03152	0/ 5.00	CLM .02198 .02962 .00315	00/ 8.00	CLM .02112 .02874 .00332	0/ 5.00	CLM .01843 .02715 .00356	00/ 5.00	CLM .01751 .02419 .00302	00/ 5.00	CLM .01682 .02338 .00289
	(ORBITER DATA)			/AL = -5.00	. 08188 . 09870 . 00724	/AL = -5.00	. 00702 . 009075 . 00702	. = -5.	CD .08371 .10027 .00723	VAL = -5.00/	CD . 08524 . 10606 . 00850	S.	CD . 08750 . 10699 . 00883	" .5.	CD . 08776 . 10839 . 00908
	0251			GRADIENT INTERVAL	CL .37260 .44364 .03060	DIENT INTERVAL	CL .37205 .43796 .02721	GRADIENT INTERVAL	CL .37881 .44568 .02918	GRADIENT INTERVAL	CL .38078 .47572 .03876	GRADIENT INTERVAL	CL .39120 .47703 .03888	GRADIENT INTERVAL	CL .39125 .48273 .04025
89	11 A 1/747 (8			3.34 GRA[DY .10762 .05150 02417	3.34 GRADII	DY .06343 .05245 00453	3.34 GRA	0Y . 05544 . 06210 . 00290	3.33 GRA	DY . 09299 . 08848 00184	3.33 CRA	DY . 08082 . 05913 00983	3.33 GRA	07 .05846 .05556 00128
DATA - CA238	14-120(CA23B		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	DX 14187 04368	RN/L =	DX 16160 07507	RN/L =	DX 19875 08338	RN/L =	DX 12810 07450 .02188	RN/L =	0x 08759 11783 01370	RN/L =	DX 01339 06019
TED SOURCE	ARC		1109.0 .0 . 375.0	392/ 0	ALPHAO 8.21903 10.38090	393/ 0	ALPHAO 8.09911 10.36610	. 394/ 0	ALPHAO 8.24803 10.35730	. 395/ 0	ALPHAO 8.11938 10.41400	. 396/ 0	ALPHAO 8.20736 10.31290	. 397/ 0	ALPHAO 8.20360 10.36870 .95258
TABULATED		E DATA	FT. XMRP YMRP ZMRP	PUN NO.	МАСН . 58972 . 58997 . 00011	RUN NO	MACH . 59034 . 59082 . 00020	RUN NO	MACH . 59086 . 59122	RUN NO	MACH . 59014 . 59148 . 00055	RUN NO	MACH . 58975 . 59139	RUN NO	MACH .59078 .59084
MAR 76		REFERENCE DAT	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN. .0125		ALPHAC 2.139 4.461 GRADIENT		ALPHAC 2.001 4.424 GRADIENT		ALPHAC 2.141 4.433 GRADIENT		ALPHAC 2.045 4.494 GRADIENT		ALPHAC 2.160 4.367 GRADIENT		ALPHAC 2.123 4.396 GRADIENT
DATE 22 MA			SREF = 6 LREF = BREF = SCALE =		. 02 7.312 7.376		02 9.885 10.083		DZ 15.083 14.830		02 29.781 29.790		02 44.565 44.873		02 50.286 50.569

TABULATED SOURCE DATA - CA238

					80 C C		ቲ ነሳ ነሳ ወ		2021		M O B B		ភ-១-
GE 188	CT 75)		1000 . 1000. 0000. 0000. 0000.		CBL 00058 00067 00067		CBL 00089 00072 00072		CBL 00093 00082 00087		CBL001130007800008		CBL00135 00112 00091
PAGE	0) (08 OCT	DATA	STAB ELEVON BOX		CYN . 00135 . 00120 . 00119 00004		CYN . 00122 . 00116 . 00110		CYN .00137 .00125 .00112		. 00124 . 00111 . 00101		. 00118 . 00116 . 00098
	(CNHD+D)	PARAMETR1C	00000.		. 00391 . 00403 . 00434 . 00434		CY . 00381 . 00355 . 00372 00002		CY .00446 .00399 .00385 00015		CY .00345 .00345 .00313		CY .00321 .00370 .00257 00012
			BETA RUDDER TORB DY	00/ 5.00	CLM .01055 .01730 .02529	.00/ 5.00	CLM .00754 .01423 .02245	.00/ 5.00	.00551 .01356 .02110	00/ 5.00	CLM .00358 .01272 .02040	.00/ 5.00	CLM .00120 .01096 .01819
	(ORBITER DATA)			- 5.	CD . 0 6234 . 067 63 . 07662	κ C	CD .06362 .06944 .07766	ξ.	CD .06432 .07001 .07789	ة. رئ	CD .06452 .07135 .07943	* Ĉ	.06614 .07428 .08344 .00382
	0251			GRADIENT INTERVAL	CL . 19222 . 25564 . 31652 . 02820	SRADIENT INTERVAL	CL . 20452 . 32169 . 02588	GRADIENT INTERVAL	CL .21029 .32850 .02621	GRADIENT INTERVAL	CL .20015 .33145 .02933	GRADIENT INTERVAL	CL . 20108 . 28989 . 34801
38	(B) 747/1 AT!			3.33 GRA	07 . 02300 . 03102 . 03823 . 0345	3.32 3RA	DY . 03074 . 03128 . 00535 00532	3.32 GRA	07 . 03801 . 03665 . 00220 00556	3.32 ORA	07 .00993 02169 03747	3.33 GRA	00963 .04981 .04093 00921
E DATA - CA238	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	0X 03013 08623 08030 01099	RN/L =	0x 06533 05879 06649	RN/L =	0X 10758 05513 10482	RN/L =	000000 08900 05953 04039	RN/L =	04528 - 13748 - 04528 - 13744
TABULATED SOURCE	ARC		# 1109. # 375.	0 /104 .	ALPHAO 3.94885 6.16485 8.32227	. 402/ 0	ALPHAO 4.06526 6.36184 8.33848	. 403/ 0	ALPH40 4.20285 6.34048 8.21470	0 /+0+ .	ALPHAO 4.02957 6.43765 8.22819 93666	0 /50% .	ALPHAO 4.05111 6.47107 8.27311 .94525
TABUL		CE DATA	YMRP ZMRP	RUN NO	MACH .58575 .58650 .58596 .00005	RUN NO	MACH .58578 .58717 .58721	RUN NO	MACH .58614 .58677 .58746	RUN NO	MACH .58614 .58672 .58737 .00027	RUN NO	MACH .58585 .58784 .58681
MAR 76		REFERENCE DATA	2690.0000 SQ.F. 474.8100 IN. 936.6800 IN.		ALPHAC 004 2.318 4.401 GRADIENT		ALPHAC 091 2.490 4.405 GRADIENT		AL PHAC . 024 2.449 4.293 GRADIENT		ALPHAC 155 2.568 4.303 GRADIENT		ALPHAC 120 2.563 4.329 GRADIENT
DATE 22 M			SREF = 6 LREF = BREF = SCALE =		02 3.048 3.021 3.274		DZ 7.066 7.198 7.335		02 9.793 9.766 9.745		02 14.781 14.585 14.592		02 29.804 29.944 29.835

189	(57		5.000 5.000 .000		CBL 00123 00103 00108	1 75 1		5.000 5.000 .000 .500		CBL 00052 00052 00000		CBL 00083 00063		CBL -,00057 -,00069
PAGE	(08 OCT	DATA	STAB # ELEVON # DX # MACH #		CYN .00117 .00106 .00098 00004) (08 OCT	DATA	STAB == ELEVON == DX == MACH ==		CYN . 00121 . 00106 00007		CYN .00108 .00102		. 00099 . 00102
	(CNHD+0)	PARAMETRIC I	0000.		. 00297 . 00396 . 00396 00001	(CNH0+1)	PARAMETRIC	0000.7		CY .00399 .00374 00012		CY .00363 .00358 00002		.00261 .00341 .0036
		u.	BETA ** RUDDER ** 10R8 ** DY	7 5.00	CLM .00023 .00905 .01819 .00391			BETA REUDDER RUDDER RUD	1, 5.00	CLM .01 613 .02348	0/ 5.00	CLM .01371 .02117 .00317	00/ 5.00	CLM .01260 .02039 .00346
	(ORBITER DATA)			AL = -5.00/	CD .06711 .07549 .08681	HTER DATA)			/AL = -5.00/	CD .06741 .07573 .00385	VAL = -5.00	CD . 06852 . 07770 . 00390		CD . 06960 . 07875 . 00406
	0251			GRADIENT INTERVAL	CL .20113 .28973 .37129	1 0251 (ORBITER			GRADIENT INTERVAL	CL .24904 .30889 .02770	GRADIENT INTERVA	CL .25617 .31771 .02615	GRADIENT INTERVAL	CL .26222 .32312 .02704
8	1747/1 AT1			. 33	03143 .02644 03328	3) 747/1 AT1			2.97 GRAE	07 17940 16385 .00720	2.96 GRA	0Y -,16145 -,16305	2.98 GRA	0Y 13953 15367 00672
DATA - CA23B	14-120(CA23B)		00000 IN. YO 00000 IN. ZO	RN/L = 3	03455 .03455 15179 16764 04547	14-120(CA23B)		.0000 IN. XO	RN/L = 3	0X 08804 05681	RN/L =	0X 09292 05746	RN/L =	0x 14676 05126 0541
TABULATED SOURCE DATA	ARC		1109.00 10.00 1375.00	406/ 0	ALPHAO 4.04059 6.34838 8.39585	ARC		# 1109.0 # 375.0	411/0	ALPHAO 6.15134 8.23496 .96420	412/ 0	ALPHAO 6.09329 8.36195 .96379	. 413/ 0	ALPHAO 6.27786 8.40798
TABULA		E DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH .58600 .58754 .58637		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .48953 .48981 .00013	NON NO	#ACH #889# #889#0	PUN NO	MACH .48931 .48962
R 76		REFERENCE DATA	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN.		ALPHAC 091 2.446 4.476 GRADIENT		REFERENCE DATA	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN.		ALPHAC 2.137 4.298 GRADIENT		ALPHAC 2.085 4.439 GRADIENT		ALPHAC 2.218 4.469 GRADIENT
DATE 22 MAR			SREF = 2 LREF = 2 BREF = SCALE =		02 44.515 44.728 44.671			SREF = CLEFF = SCALE =		02 3.328 3.325		02 6.838 7.184		02 9.770 9.780

ORIGINAL PAGE IS OF POOR QUALITY

E 190	(27 T		5.930 5.000 .500		CBL 00101 00093		CBL 00105 00102		CBL 00103 00089	1 75 1		5.000 5.000 300		CBL 00043 00048 00003		CBL 00040 00040
PAGE	1) (08 OCT	DATA	STAB = ELEVON = DX MACH =		CYN .00104 .00096 00003		CYN .00101 .00097		CYN .00092 .00091	2) (08 OCT	DATA	STAB ELEVON = DX MACH =		CYN .00072 .00066 00003		CYN .00055 .00077
	(CNHO+1)	PARAMETRIC	0000.		CY .00359 .00354 00002		CY .00339 .00337 00001		CY .00265 .00310 .00021	(CNHO+2	PARAME TR I C	0000.		CY . 00328 . 00309		CY . 00224 . 00285 . 00029
			BETA RUDDER 1	0/ 5.00	CLM .01070 .01950 .00359	0/ 5.00	CLM .00971 .01848 .00399	07 5.00	. 00874 . 01705 . 00393			BETA = RUDDER = 10RB = 0Y	00/ 5.00	CLM .01660 .02362	.00/ 5.00	CLM .01468 .02120 .00317
	(ORBITER DATA)			VAL = -5.00/	. 07001 . 08023 . 00416	VAL = -5.00,	CD . 07336 . 08339 . 00456	VAL = -5.00,	CD . 07453 . 08539 . 00513	(ORBITER DATA)			ii R	CD .06927 .07798	* ए	CD .07109 .08041 .00453
	AT1 0251 (OR			GRADIENT INTERVAL	CL .26298 .33277 .02844	GRADIENT INTERVAL	CL .28104 .35226 .03237	GRADIENT INTERVAL	CL .28802 .36453 .03617	AT1 0251 (OR			GRADIENT INTERVAL	CL .25205 .31146 .02952	GRADIENT INTERVAL	CL . 26796 . 32793 . 02917
82	747/1			2.97 GRA	07 11379 09466 00779	2.97 GRAI	DY 13076 13496 00191	2.97 GRAI	DY 11385 16629 02479	747/1			1.98 GRAI	0Y 00631 02654 01006	1.98 GRA	70 -,04136 -,01484 .01290
DATA - CA238	14-120(CA23B)		0000 IN. YO 0000 IN. YO 0000 IN. ZO	RN/L = 6	DX 15807 06484 .03798	RN/L =	0x 07823 04136	RN/L =	DX 07656 09178 00719	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	.00134 .01001 .00564	RN/L =	DX 07398 07285 .00055
ATED SOURCE	ARC		1109.01	0 /414	ALPHAO 6.05709 8.37959 9.94620	415/0	ALPHAO 6.25657 8.35752 95503	. 416/ 0	ALPHAO 6.22878 8.27081 .96531	ARC		# 1109. # 375.	. 421/ 0	ALPHAO 6.15824 8.14827 .98892	. 422/ 0	ALPHAO 6.28847 8.32691 .99140
TABULATED		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH . 48945 . 48934 00005	RUN NO	MACH . 48943 . 49048 . 00048	RUN NO	MACH . 49039 . 48927 00053		E DATA	FT. XMRP.	RUN NO	MACH . 29686 . 29674 00006	RUN NO	MACH .29723 .29615 00053
MAR 76		REFERENCE DATA	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN.		ALPHAC 1.986 4.441 GRADIENT		ALPHAC 2.215 4.415 GRADIENT		ALPHAC 2.214 4.330 GRADIENT		REFERENCE DATA	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN. .0125		ALPHAC 2.209 4.221 GRADIENT		ALPHAC 2.291 4.347 GRADIENT
DATE 22 MA			SREF # 6 BREF # 6 SCALE = 5		DZ 14.789 14.819		02 29.638 29.826		02 44.438 44.694			SREF # 6		02 3.128 3.123		02 7.085 7.303

JULATED SOURCE DATA - CA238
76 TABULATED
DATE 22 MAR 7

DATE 22 MAR 76	1R 76	TABULA	TABULATED SOURCE DATA	DATA - CA238	38					PAGE	<u>6</u>
			ARC	ARC 14-120(CA23B)		747/1 ATI OZSI (ORBITER DATA)	ITER DATA)		(CNHO45)	2) (08 OCT	1 27 1
	REFERENCE DATA	E DATA						•	PARAMETRIC	DATA	
SREF = CLREF = BREF = SCALE =	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.	FT. XMRP YMRP ZMRP	= 1109.0000 = .0000 = 375.0000	000 IN. XO 000 IN. YO 000 IN. ZO			∞ ∝ ~ □	BETA = RUDDER = 10RB = DY	0000	STAB = ELEVON = DX =	5.000 5.000 .300
		RUN NO.	423/ 0	RN/L =	1.98 GRAD	GRADIENT INTERVAL	AL = -5.00/	5.00			
02 9.285 9.970	ALPHAC 2.180 4.347 GRADIENT	масн . 29680 . 29657 00010	ALPHAO 6.13881 8.34801 1.01948	DX 01604 10366 04044	0Y 02059 04935 01327	CL .26123 .33184 .03258	. 07080 . 08153 . 00495	.01300 .02035 .020339	CY .00085 .00155	CYN .00037 .00064 .00003	CBL 00075 00040
		RUN NO.	424 O	RN/L =	1.98 GRAD	GRADIENT INTERVAL	AL = -5.00/	5.00			
02 14.488 14.575	ALPHAC 2.266 4.354 GRADIENT	MACH . 29699 . 29707 . 00004	ALPHAO 6.25576 8.31217 98457	DX 06213 04284 00924	07 -,02430 -,03813 -,0665	CL .27183 .34189 .03356	. 07285 . 08258 . 00466	CLM .01183 .01958 .00371	CY .00222 .00238 .00008	CYN .00055 .00053 00001	CBL 00057 00084 00013
		RUN NO.	. 425/ 0	RN/L =	1.97 GRAD	GRADIENT INTERVAL	AL = -5.00/	, 5.00			
02 29.804 29.724	ALPHAC 2.191 4.292 GRADIENT	MACH . 29669 . 29648 00010	ALPHAO 6.21467 8.26295 97492	DX 11139 07168	DY 03212 04141	CL . 28162 . 35957 . 03711	CD .075 23 .0657 3 .00500	CLM .01001 .01829 .00394	.00246 .00186 .00028	CYN . 00052 . 00042 00005	CBL 00095 00081 .00007
		RUN NO.	0 /924 .	RN/L =	1.97 GRA	GRADIENT INTERVAL	.AL = -5.00/	2.00			
DZ 44.766 44.688	ALPHAC 2.202 4.266 GRADIENT	MACH .29674 .29673 00000	ALPHAO 6.22064 8.24369 .98014	0X 08944 05498 .01670	70 - 11793 - 10352 - 00698	CL . 28835 . 35586 . 03755	CD .07647 .08679 .00500	CLM 00910 .01658 .00363	. 00189 . 00104 00041	CYN .00051 .00038 00006	CBL 00071 00048 .00011

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ARC 14-120 (CA23B) 0251

(CNH043) (09 OCT 75) PAGE 192

	5.000						
CONTROL OF THE PARTY OF THE PAR			CBL 00167 00166 00189 00115 00270		CBL 00161 00137 001140 00119 00119 00015 00019 00005		CBL 00139 00120 00124 00124 00245
QVO		5.00	CYN .00091 .00087 .00067 .00080 .00082	5.00	. 00110 . 00112 . 00012 . 00008 . 00008 . 00008	5.00	CYN .00110 .00112 .00104 .00063 .00063
	BETA	-5.00/		-5.00/	CY . 00253 . 00218 . 00245 . 00245 . 00249 . 00371 . 00256	-5.00/	CY . 00233 . 00206 . 00182 . 00199 . 00264 . 00256
		INTERVAL	.00017 .00504 .01312 .01634 .01792 .02112	INTERVAL .	CLM 01801 00568 .01329 .01815 .01805 .02111	INTERVAL =	CLM0182300111 .00540 .01263 .01609 .01815
		GRADIENT	CD .07023 .070845 .09145 .11588 .15794 .21248	GRADIENT	CD . 06239 . 07051 . 07907 . 09298 . 11739 . 15713 . 21092	GRAD I ENT	CD .06242 .07943 .07943 .11703 .11703 .21125
	IN. X0 IN. X0 IN. Z0	/L = 3.34	CL .24162 .33066 .42465 .53958 .65671 .75391	1 = 3.33	CL 01077 .24231 .33123 .43222 .54431 .65892 .75186	L = 3.31	CL - 00791 - 23122 - 23986 - 42386 - 53990 - 55484 - 74957
	.0000 .0000 375	31/ 0 RN/L	MACH . 5942; . 59503 . 59509 . 59415 . 59442 . 59365	32/ 0 RN/L	MACH . 59205 . 59217 . 59211 . 59311 . 59195 . 59195	33/ 0 RN/L	MACH .58927 .58917 .58939 .58959 .58736 .58736
DATA	XMRP = ZMRP =	RUN NO.	ALPHAO 4.518 6.328 8.269 10.303 12.406 14.397 GRADIENT	RUN NO. 4	ALPHAO 729 +.597 6.440 8.441 10.411 12.376 14.347 GRADIENT	RUN NO.	AL PHAO 608 4.480 5.499 8.438 10.448 12.427 14.433 GRADIENT
REFERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		0.2 2.235 2.235 1.862 1.862 2.332 2.332 2.332		02 17.824 20.582 20.432 20.388 20.672 20.407		02 37.645 40.709 40.387 40.324 40.527 40.537
	SREF = LREF = BREF = SCALE =						

DATE 22 MAR	76	TABULATED	SOURCE DATA	- CA23B						PAGE 193	•
			ARC 14-120	14-120(CA23B) 0	0351				(CNH044) (08	OCT 75	~
	REFERENCE DATA	ATA.						PARA	PARAMETRIC DATA		
SREF = 269 LREF = 47 BREF = 93 SCALE =	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.	XMRP YMRP = 2	11 09.000.11 .0000.375.375.0000	N.N. 200 200 200 200 200 200 200 200 200 20			BETA		.000 ELEVON -	ம்	000
		RUN NO. 44	11 0 RN/L	3.34	GRADIENT	INTERVAL =	-5.00/ 5	. 00			
	DZ 60.484 60.085 60.673 60.708 57.099	ALPHAO 6.381 8.325 10.419 12.411 14.003 GRADIENT	MACH . 59485 . 59469 . 59356 . 59481 . 59270	CL .33887 .43070 .55181 .66763 .74137	CD .05984 .07332 .09788 .13666 .17870	CLM 01955 01087 00571 00462 00250	CY .00245 .00132 .00132 .00132	.00106 .00108 .00103 .00093 .000115	CBL0012000142001420016200162001620016200000		
			ARC 14-120	(CA238)	1520				(CNH045) (09	9 OCT 75	-
	REFERENCE DAT	ATA						PAR/	PARAMETRIC DATA		
SREF # 266 LREF # 4' BREF # 93	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.	XMRP # ZMRP #	1109.0000 11 .0000 1 375.0000 1	000 X . X 200 200 200 200 200 200 200 200 200 20			BETA		.000 ELEVON -	•	000
		RUN NO. 4	51/ 0 RN/L	L = 3.33	GRADIENT	INTERVAL .	-5.00/	5.00			
	0.2 2.231 2.483 2.239 1.921 2.551 2.114	ALPHAO 4.557 6.357 8.320 10.373 12.477 14.400 GRADIENT	MACH .59437 .59364 .59253 .59341 .59286 .59286	CL .16397 .25547 .34308 .45153 .57837 .67445	00124 04733 05761 07643 11649 1649	CLM .01406 .02102 .03255 .03242 .03669 .03688	CY .00530 .00535 .00552 .00584 .00588 .00588	CYN - 00048 - 000043 - 00106 - 00106 - 00091 - 00070	CBL 00251 00253 00231 00284 00242 00000		
		RUN NO. 4	521 0 RN/L	L = 3.31	GRADIENT	INTERVAL =	-5.00/	5.00			
	02 17.573 20.373 20.172 20.312 20.516 20.516	AL PHAO 792 4.401 6.464 8.466 10.508 12.332 GRADIENT	MACH 59296 59380 59314 59521 59488 59398	CL 08601 -15840 -26188 -35598 -46175 -57464	.03744 .04089 .04820 .05877 .05877 .11421	CLM 00963 .01308 .02120 .03393 .03847 .03651	CY .00655 .00648 .00620 .00555 .00619 .00605	CYN 00062 00010 00058 00058 00075	CBL 00239 00213 00213 00234 00223		

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(CNH045) (09 OCT 75)

TABULATED SOURCE DATA - CA238

ARC 14-120(CA23B) 03S1

	000.			000 75)		000.		
PARAMETRIC DATA	.000 ELEVON =		CBL 00243 00243 00205 00267 00247 00013	(CNH046) (09 (PARAMETRIC DATA	.000 ELEVON =		CBL 00193 00177 00187 00187 00155 00155
PARA	# .<<	5.00	CYN - 000042 - 000033 - 000048 - 000048 - 000082 - 000083 - 000083		PARA	H ≪	5.00	CYN 000083 000094 000004 000006 000006 000008
	BETA	-5.00/	CY .00754 .00631 .00615 .00617 .00617			BETA	-5.00/	CY .00324 .00324 .00319 .00351 .00336 .00336 .00376
		GRADIENT INTERVAL	01019 01277 .023218 .03398 .03546				IT INTERVAL	CLM .02042 .02739 .03396 .03348 .05414 .05411
			CD .03733 .04108 .04606 .05893 .07779 .116462 .00073	0251			GRADIENT	CD .05797 .05963 .05963 .05922 .09364 .13350
	IN. X0 IN. X0 IN. Z0	RN/L = 3.31	CL 08823 -15284 -25326 -34645 -45227 -57301 -67378	14-120(CA23B)		N. X0 N. X0 IN. X0	RN/L = 3.31	CL 08044 .03556 .14633 .24368 .33568 .43288 .43288 .56002 .56151
	1109.0000 .0000 375.0000	453/ 0 RP	MACH .59769 .59951 .59907 .59917 .59904	ARC 14-		1109.0000 .0000 375.0000	461/0 RP	MACH .59460 .59537 .59588 .59712 .59706 .59705
DATA	XMRP H	RUN NO.	AL PHAO738 4.411 6.397 8.474 10.464 12.4938 14.497 6RADIENT		DATA	XMRP TAMES ZMRP II	RUN NO.	ALPHAO 234 2 . 253 4 . 484 6 . 430 8 . 402 10 . 328 12 . 418 14 . 328 6RADIENT
REFERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		02 37.990 40.220 39.923 40.358 40.425 40.425		REFERENCE DATA	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN. .0125		02 38.822 46.088 40.254 40.159 40.254 40.591 39.934
	SREF = LREF = BREF = SCALE *					SREF = LREF = BREF = SCALE =		

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195	75)		000.										
PAGE	7) (21 OCT	DATA	ELEVON =		02 49.63740 50.29570		DZ 48.86470 50.29140 .00000		02 49.00850 50.75890		DZ 48.93470 50.66530		02 49.39420 51.00510 .00000
	(CNHO+1	PARAMETR1C	.000		CBL0014000179		CBL 00151 00199		CBL 00153 00166		CBL 00175 00193		CBL 00173 00158
			BETA = 0.02	00.5 /0	CYN .00088 .000019	3/ 5.00	CYN . 00059 . 00020 . 00000	0/ 5.00	CYN .00079 .00033	0/ 5.00	CYN . 00069 . 00003	.007 5.00	.00000 .00015
				WAL = -5.00/	. 00315 . 00309 . 00000	NAL = -5.00/	CY .002 05 .0031 8 .00000	TVAL = -5.00/	CY .00306 .00393	₹VAL = -5.00	CY . 00282 . 00359 . 00000	با ر	CY .00329 .00322
				GRADIENT INTERVAL	CLM .03805 .05454 .00000	GRADIENT INTERVAL	CLM .03805 .05406 .00000	GRADIENT INTERVAL	CLM .03798 .05428	GRADIENT INTERVAL	CLM .03758 .05420	GRADIENT INTERVAL	CLM .03735 .05454 .00000
CA23B	38) 0251			3.32 GRA	00 . 06445 . 09661 . 00000	3.32 GR/	00000.	3.31 GR/	CD . 06417 . 09432	3.31 GR	.06353 .09595 .00000	3.30 GR	.06360 .09549 .00000
1	14-120(CA23B		.0000 IN. YO .0000 IN. ZO	RN/L .	CL . 22276 . 44810 . 00000	RN/L =	CL .22272 .43519 .00000	RN/L =	CL .22044 .43279 .00000	RN/L =	CL .21019 .44259 .00000	RN/L *	CL .21037 .44320 .00000
TED SOURCE DATA	ARC		1109.0 1.0 1.0 1.0	4717 0	MACH . 59522 . 59562 . 00000	472/ 0	МАСН . 59612 . 59578 . 00000	. 473/ 0	MACH . 59634 . 59508 . 00000	0 /4/4 .	MACH .59647 .59516 .00000	. 475/ 0	МАСН . 59557 . 59415
TABULATED		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	PCN NO.	ALPHAO 6.055 10.519 GRADIENT	RUN NO.	ALPHAO 5.995 10.412 GRADIENT	RUN NO.	ALPHAO 5.974 10.420 GRADIENT	RUN NO.	ALPHA0 5.891 10.503 GRADIENT	ON NO	ALPHAO 5.884 10.481 GRADIEVT
22 MAR 76		REFERE	2690.0000 474.8100 936.6800		046 046		0X 4.734 5.194		0X 9.687 10.187		0X 14.701 15.158		DX 19.661 20.118
DATE 22			SREF = LREF = BREF = SCALE =										

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1 22 1		000.										
B) (21 OCT	DATA	ELEVON =		DZ 2.71022 3.37922 .00000		DZ 1.96064 3.68903 .00000		02 2.05427 3.95290 .00000		02 2.33897 3.53795 00000		D2 1.87798 3.29780 .00000
(CNH0+8)	PARAME TRIC	.000 3.000		CBL 00199 00267		CBL 00203 00204		CBL 00173 00223		CBL 00209 00205		CBL 00205 00233
		BETA # 02	00/ 5.00	CYN .00064 .00003	00/ 5.00	CYN .00074 .00023	00/2 2.00	CYN .00082 .00033	00/ 5.00	CYN .00079 .00023	00/ 2.00	CYN .00081 .00014
			RVAL = -5.00/	CY .00291 .00342	RVAL = -5.00/	CY .00324 .00355	RVAL = -5.00%	CY .00350 .00391	RVAL = -5.00/	.00389	RVAL = -5.00/	CY .00372 .00342
			GRADIENT INTERVAL	CLM .03847 .05476 .00000	GRADIENT INTERVAL	CLM .03803 .05506	GRADIENT INTERVAL	CLM .03790 .05458	GRADIENT INTERVAL	CLM .03852 .05462	GRADIENT INTERVAL	CLM .03788 .05440 .00000
38) 0251		•	3.30 GR	.06421 .09688 .00000	3.31 GR	CD .06332 .09581	3.32 GR	.06344 .09478 .00000	3.31 GR	.05388 .09403 .00000	3.31 GR	CD .05304 .09437 .00000
ARC 14-120(CA23B)		09.0000 IN. YO .0000 IN. YO .75.0000 IN. ZO	RN/L .	CL .22401 .45214 .00000	RN/L =	CL .21478 .44537 .00000	RN/L =	CL .21247 .43902 .00000	RN/L =	CL .22493 .43587 .00000	RN/L =	CL .21325 .43973 .00000
ARC		375.	0 /184	MACH .59478 .59419 .00000	485/ 0	MACH .59465 .59475 .00000	483/ 0	MACH .59403 .59511 .00000	0 /484	MACH .59497 .59456 .00000	485/ 0	MACH .59425 .59478 .00000
	REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAO 6.062 10.557 GRADIENT	RUN NO.	ALPHAO 5.859 10.488 GRADIENT	RUN NO.	ALPHAO 5.908 10.472 GRADIENT	RUN NO.	ALPHAO 6.043 10.416 GRADIENT	RUN NO.	ALPHAO 5.858 10.427 GRADIENT
	REFERE	2690.0000 474.8103 935.6800		0x 066 194		DX 4.719 5.154		DX 9.696 10.116		DX 14.663 15.113		0x 19.772 20.191
		SREF # LREF # BREF # SCALE #										

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1AR 76	TABULATED	S	OURCE DATA - CA	CA238					PAGE	GE 197
		ARC	14-120(CA23B)	747/1	AT1 0251 (OR	(ORBITER DATA)		(B00HNQ)	80)	OCT 75)
REFERE	REFERENCE DATA							PARAMETR1C	DATA	
2690.0000 S 474.8100 1 936.6800 1	SO.FT. XMRP IN. YMRP IN. ZMRP	= 11173	.0000 IN. YO				BETA # RUDDER # 10RB # DY #		STAB = ELEVON = DX =	5.000 5.000 .000.
	RUN NO	. 81/ 0	RN/L =	3.35 GRA	GRADIENT INTERVAL	WAL = -5.007	00/ 5.00			
02 4.365 2.954 3.443	ALPHAC 192 2.364 4.308 GRADIENT	BETAC 02401 03533 04096	BETAO 10876 09956 10169	PH1C 7.13931 .85653 .54517 -1.62692	PHIO .91914 .69755 507102	CA .03572 .03008 .01995 00381	CN . 32977 . 35124 . 42111 . 02195	CSL 00047 00065 00069	CLN .00125 .00108 .00085 00010	
	RUN NO	1. 82/0	RN/L =	3.35 GR/	GRADIENT INTERVAL	ıl RÜ	00/ 5.00			
DZ 6.994 7.541 7.335	ALPHAC - 126 2.378 4.361 GRADIENT	BETAC 02455 03096 03794	BETAO 04307 04527 02562	PHIC -10.98800 -74617 .49892 2.65110	PH10 .41163 .31383 .14322 05892	CA .04027 .02981 .01999	CN .29732 .36065 .43337	CSL 00049 00068 00066	CLN .00123 .00115 .00083 00009	
	RUN NO). 83/ 0	RN/L =	3.36 GR	GRADIENT INTERVAL	። ሚ	.007 5.00			
02 9.751 9.637 9.522	ALPHAC 141 2.414 4.401 GRADIENT	BETAC 02355 03349 03349	BETAO 01931 02549 03304 00299	PHIC -9.48584 .71430 .43641 2.26917	PHIO . 18416 . 17686 . 18466 00003	CA .04073 .02980 .02073	CN .29863 .36331 .43228	CSL 00070 00102 00081	CLN .00110 .00086 .00087	
	RUN NO	0. 84/ 0	RN/L =	3.35 GR	GRADIENT INTERVAL	ii Ç	.007 5.00			
02 14.752 15.063 15.188	ALPHAC - 014 2.461 4.492 GRADIENT	BETAC 02608 02807 03685	BETA0 02440 04108 03121	PH1C -62.46180 .65368 .47049 14.38136	PHIO22804 .28148 .17167	CA . 04130 . 03037 . 02036 00464	CN .29959 .36906 .44943	CSL 00079 00097 00082 00001	CLN .00108 .00104 .00076	
	RUN NO	0. 85/ 0	RN/L =	3.35 GR	GRADIENT INTERVAL	1. 1.	.007 5.00			
02 29.536 29.860 29.902	ALPHAC 028 2.454 5.306 GRADIENT	BETAC 02407 03165 03927	BETAO 03133 04291 03159	PH1C -40.44000 .74080 .51892 9.85305	PH10 . 29506 . 29463 . 17718	CA .04332 .03154 .02249	CN .29658 .38058 .45776	CSL 00085 00107 00108	CLN .00109 .00098 .00064	

OCT 75)		000.1- 000.00.00.00.00.00.00.00.00.00.00.00.00					0CT 75)		5.000 .000 .600				
80) (C DATA	STAB = ELEVON = DX = MACH =		CLN .00100 .00086 .00057 00009		CLN .00094 .00091 .00051	8 0)	DATA	STAB = ELEVON = DX =		CLN .00084 .00067 00007		CLN . 00102 . 00076 00011
BOOHNO)	PARAMETRIC			CSL 00076 00101 00104		CSL 00083 00083 00083	(600HNQ)	PARAMETRIC			CSL 00068 00073 00073		CSL 00087 00060 00071
5		BETA RUDDER I	.00/ 5.00	CN . 29396 . 38642 . 47677 . 04115	-5.00/ 5.00	CN . 29349 . 39006 . 47594 . 04084	-		BETA # 10RB # 0Y	.00/ 5.00	CN .45079 .47805 .55909	00/ 2.00	CN .40271 .48241 .56336
(ORBITER DATA)			ii 10	CA .04486 .03257 .02274 00500	H	CA . 04512 . 03274 . 02314 00494	(ORBITER DATA)			* ľ.	CA .02290 .01793 .00968	RVAL = -5.00/	CA . 02827 . 01788 . 01014 00416
AT1 0251 (C			GRADIENT INTERVAL	PH10 .22277 .16089 .10662	GRADIENT INTERVAL	PHIO . 15753 . 19650 . 12637	AT1 0251 (0			GRADIENT INTERVAL	PH10 . 19735 . 16196 . 10141	GRADIENT INTERVAL	PHIO .21687 .21172 .10044 02529
38) 747/1		0.00	3.35 GF	PH1C -23.10330 .76090 .46448 5.59553	3.3⁴ GF	PH1C -14.70380 .76395 .50951 3.59220	747/1			3.35 GR	PHIC 5.99245 .73241 .44328 -1,38154	3.35 68	PHIC -57.20780 .75188 .45919 13.82212
14-120(CA23B)		.0000 IN. XO .0000 IN. YO .0000 IN. ZO	RN/L *	BETAO 02362 02345 01912	FN/L =	BETAO 01649 02879 02255	14-120(CA23B)		19.0000 IN. XO .0000 IN. YO 75.0000 IN. ZO	RN/L	BETAO 03081 02885 02166	RN/L	BETAO -,03073 -,03839 -,02139
ARC		1109	0.86/0	BETAC 02757 03315 03517	0. 87/ 0	BETAC 02787 03319 03850 00237	ARC		H # H	0. 91/ 0	BETAC 02879 03542 03550	0. 92/ 0	BETAC 02295 03277 03474 00278
	REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 065 2.496 4.342 GRADIENT	RUN NO	ALPHAC 106 2.490 4.334 GRADIENT		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC .274 2.380 4.334 GRADIENT	RUN NO	ALPHAC 015 2.498 4.339 GRADIENT
	REFERE	2690.0000 S 474.8100 1 936.6800 1		DZ 44.873 44.666 45.029		02 50.039 50.412 50.166		REFERE	2690.0000 Si 474.8100 11 936.6800 11		02 8.075 7.276 7.800		02 9.930 10.158 9.843
		SREF = LREF = BREF = SCALE =							SREF " REF " SCALE "				

) (6	DATA	STAB ELEVON DX MACH		7000 · · · · · · · · · · · · · · · · · ·		OC		CLN		000
(600HNQ)	PARAMETR1C			CSL 00093 00086 00086		CSL 000116 00097 00064		CSL 00107 00089 00083		CSL 00111 00074 00008
		BETA RUDDER IN 10RB	10/ 5.00	CN . 39523 . 48206 . 56879 . 03876	10/ 5.00	CN .40021 .49878 .59425 .04381	10/ 5.00	CN .38564 .49517 .61541	00/ 5.00	CN .39818 .50829 .61452
(ORBITER DATA)			WAL = -5.00/	CA . 02986 . 01861 . 01106 00425	IVAL = -5.00/	. 03117 . 01981 . 01260 00424	WAL = -5.00/	CA . 03408 . 02155 . 01315 00449	WAL = -5.00/	CA . 03303 . 02062 . 01357 00438
0251			GRADIENT INTERVAL	PH10 .27336 .16081 .09991	GRADIENT INTERVAL	PH10 .14975 .18566 .08835	GRADIENT INTERVAL	PH10 .12774 .13191 .00156	GRADIENT INTERVAL	PH10 .17333 .13939 .12503 01095
CA238 :A238) 747/1 AT!			3.35 GRA	PHIC -12,10710 -68879 -45608 2,99138	3.35 GRA	PHIC -42,27900 .78716 .55338 10.21075	3.34 GRA	PHIC -6.94078 772242 50205	3.35 GR/	PHIC -20.97440 .73404 .52481 5.04293
, ,		.0000 IN. YO .0000 IN. YO .0000 IN. ZO	RN/L =	BETAO 03827 02906 02133	FN/L =	BETAO 02110 03376 01885	RN/L =	BETAO 01754 03095 02844	RN/L =	BETAO 02435 02537 02682 00054
20		= 1109. = 375.	. 93/ 0	BETAC 02177 03046 03437	0 /46 .	BETAC 02424 03487 04212	. 95/ 0	BETAC 02338 03033 03926 00337	0 /96 .	BETAC 03005 03265 04020
TABULATED	NCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC - 101 2.534 4.322 GRADIENT	RUN NO	ALPHAC 027 2.539 4.365 GRADIENT	RUN NO	ALPHAC 192 2.406 4.485 GRADIENT	RUN NO	AL PHAC 078 2.550 4.393 GRADIENT
MAR 76	REFERENC	2690.0000 S 474.8100 1 936.6800 1		02 14.862 14.490 15.108		02 29.926 29.957 29.720		02 44.465 44.798 44.826		02 50.555 50.407 50.452
DATE 22 M		SREF LREF BREF SCALE			0:	RIGINAL	PA	GE IB		

-1.00 .000 .000 .000 .000

STAB ELEVON DX MACH

CLN .00084 .00038 -.00035

CLN .00092 .00034 -.00026 -.00025

CLN .00089 .00023 -.00047 -.00030

8

PAGE 08 OCT

OF POOR QUALITY

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA)

PAGE 200

(DNH010)

	5.000 5.000 5.000										
DATA	STAB = ELEVON = DX = MACH =		CLN .00103 .00053 00020		CLN .00100 .00056 00041		CLN .00089 .00044 00033		CLN .00082 .00024 00039		CLN .00082 .00027 .00027
PARAMETRIC			CSL 00099 00075 00075		CSL 00095 00060 00055		CSL 00112 00092 00094		CSL 00119 00096 00078		CSL 00120 00072 00102
	BETA # RUDDER # 10RB # DY	00/ 5.00	CN . 40582 . 48704 . 56921 . 03945	00/ 5.00	CN .40472 .49169 .58229 .03880	00/ 5.00	CN .40706 .49209 .58673	00/ 5.00	CN .40782 .50881 .60720	.00.5 .00	CN .40758 .52122 .62324 .04739
		RVAL = -5.00/	CA .02829 .01814 .01076	RVAL = -5.00/	CA .02923 .01834 .01117	RVAL = -5.007	CA .02949 .01914 .01176	RVAL = -5.00/	CA .03104 .01981 .01308 00400	RVAL = -5.00/	CA .03188 .01993 .01367 00404
		GRADIENT INTERVAL	PH10 .58112 .50184 .39704 04435	GRADIENT INTERVAL	PH10 .25384 .18864 .18940	GRADIENT INTERVAL	PHIO .27412 .18060 .13707	GRADIENT INTERVAL	PH10 .14541 .13985 .10761	GRADIENT INTERVAL	PH10 . 22554 . 18116 . 10897 02532
		3.39 GR	PHIC 15.98680 .99677 .52838	3.38 GR	PHIC -9.14115 .99200 .52480	3.37 GR	PHIC -10.91640 .87350 .48698 2.59261	3.36 GR	PHIC -17.50900 .96584 .52247 +.11272	3.35 GR	PHIC -16.47020 .91470 .50917 3.87374
	1109.0000 IN. XO .0000 IN. YO 375.0000 IN. ZO	RN/L =	BETAO 08097 08924 08411	FN/L #	BETAO 03516 03365 04055 00111	RN/L	BETAO 03806 03222 02935	RN/L =	BETAO 02025 02508 02305	RN/L	BETAO 03145 03268 02344
	11 H H	0. 101/ 0	BETAC 03786 04006 03935 00037	NO. 102/ 0	BETAC 03319 04042 03977	0. 103/ 0	BETAC 03442 03607 03720 00061	0 /401 .0	BETAC 03396 03978 04015	0. 105/ 0	BETAC 03296 03866 03932 00144
REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC .132 2.303 4.270 GRADIENT		ALPHAC 206 2.335 4.346 GRADIENT	RUN NO	ALPHAC 178 2.367 4.381 GRADIENT	RUN NO	ALPHAC 108 2.360 4.407 GRADIENT	RUN NO	ALPHAC 111 2.422 4.429 GRADIENT
REFERE	2690.0000 9 474.8100 1 936.6800 1		02 6.742 7.349 7.463		02 10.009 10.088 10.447		02 15.028 14.812 15.043		DZ 29.734 30.254 29.860		DZ 44.868 45.183 45.129
	SREF = LREF = BREF = SCALE =										

201	. 75		5.000 5.000 .000 .600			(27 T		-1.000 5.000 .000						
PAGE) (08 OCT	DATA	STAB ** ELEVON = DX MACH =		CLN . 00084 . 00024 00033 00026	1) (08 OCT	DATA	STAB = ELEVON = DX MACH =		. 00108 . 00116 . 00101 . 00101		CLN .00123 .00125 .00125		CLN .00128 .00123 .00116
	(DNH010)	PARAMETR1C	.000 .000 .000 .000		CSL 00107 00079 00081	(DNH011)	PARAMETRIC	000		CSL 00063 00043 00055		CSL 00060 00070 00066		CSL 00072 00057 00079 0001
			BETA = RUDDER = 10RB = DY	0/ 5.00	CN .40721 .51901 .62856 .04901			BETA = RUDDER = 10RB = DY	.00/ 5.00	CN . 18739 . 24792 . 31069	.00/ 5.00	CN .19935 .25843 .31628	00.8 /00	CN .19967 .26129 .32235 .02696
	(ORBITER DATA)			VAL = -5.00/	CA .03236 .02033 .01367 00419	(ORBITER DATA)			* ?-	CA . 04832 . 04025 . 03104 00409	H fù	CA .04832 .04007 .03136 00380	TVAL = -5.00	CA . 04862 . 04047 . 03081 00390
	AT1 0251 10R			GRADIENT INTERVAL	PH10 .22512 .13458 .07855 03278	AT1 0251 (OR			GRADIENT INTERVAL	PH10 1.58291 1.02370 .75986 19622	GRADIENT INTERVAL	PH10 1.69918 1.00897 .81416	GRADIENT INTERVAL	PH10 1.64035 1.03445 77832
38	747/1			3.34 GRA	PH1C -24 , 19930 . 84657 52230 5.72305	747/1			3.34 GR/	PHIC 26.60780 .77746 .46360 -6.30222	3.35 GR/	PHIC -8.21007 .74906 .50986 2.06044	3.35 GR	PHIC -12.50350 -79807 -50052 5.94672
: DATA - CA23B	14-120(CA23B)		0000 IN. XO	RN/L *	BETAO 03157 02435 01688	14-120(CA23B)		0000 1N. XO 0000 1N. YO 0000 1N. ZO	RN/L =	BETAO 11075 10941 .10860	RN/L =	BETAO 11970 10988 11583	RN/L *	BETAO 11596 11241 11246
ATED SOURCE	ARC		± 1109 = 375	0. 106/ 0	BETAC -,03425 -,03651 -,04021 -,00131	ARC		# 1109. # 375.	0. 1111 0	BETAC 02341 03080 03447	0. 112/ 0	BETAC 02451 03117 03785 00299	NO. 113/ 0	BETAC 02656 03276 03856
TABULATED		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	PUN NO	ALPHAC 076 2.472 4.415 GRADIENT		REFERENCE DATA	Z. FT. XMRP Z. YMRP Z. ZMRP	RUN NO	ALPHAC .047 2.270 4.264 GRADIENT	RUN NO	ALPHAC 170 2.385 4.257 GRADIENT	RUN	ALPHAC 120 2.353 4.419 GRADIENT
MAR 75		REFEREN	2690.0000 SQ 474.8100 IN 936.6800 IN		02 50.418 50.480 50.477		REFERE	2690.0000 SQ 17.1.8100 IN 936.6800 IN		02 3.151 3.118 3.528		02 7.547 7.199 7.175		02 9.781 9.781 9.491
DATE 22 M			SREF * LREF * SCALE *					SREF # LREF # BREF = SCALE =						

(DNH011) (08 OCT 75)

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA)

	-1.000 5.000 .000 .600							0CT 75)		-1.000 5.000 .000		
PARAMETRIC DATA	STAB ELEVON BOX		CLN .00137 .00137 .00120		CLN .00127 .00111 .00120			80 J	DATA	STAB = ELEVON = DX = MACH =		CLN .00125 .0013 .00086 00009
	0000		CSL 00081 00067 00080		CSL 00098 00086 00101 00000		CSL -,00093 -,00081 -,00095 -,00000	(DNH012)	PARAMETRIC	000. 000. 9		CSL 00049 00056 00056
	BETA ERUDDER I	.00/ 5.00	CN .20441 .26890 .33371 .02905	00/ 5.00	CN . 19895 . 27909 . 35546 . 03378	.00/ 5.00	CN . 19869 . 29112 . 37378 . 03816			BETA = RUDDER = 10RB = DY	.00/ 5.00	CN .29777 .35714 .42699 .02997
		ii r	CA .04944 .04077 .03107	RVAL = -5.00/	CA .05145 .04271 .03186 00420	ii Ü	CA .05283 .04318 .03225 00447	(ORBITER DATA)			* -5	CA .03871 .02821 .01896 00461
		GRADIENT INTERVAL	PH10 1.61977 1.03828 .81656	GRADIENT INTERVAL	PHIO 1.68668 .99348 .79100	GRADIENT INTERVAL	PH10 1.52576 .96551 .80359	ATI 0251 (OF			GRADIENT INTERVAL	PH10 1.07055 .81762 .59669
	500	3.35 GF	PHIC -37.75920 .80362 .50413 8.91129	3.35 GR	PHIC -8.53365 .73812 .51832	3.34 GR	PH1C -11.09150 .81448 .49958 .59569	747/1			3.35 GR	PH1C 32.59070 .68203 .50466
	0000 IN. YO 0000 IN. YO 0000 IN. ZO	RN/L #	BETAO 11731 11444 11849 00021	FN/L =	BETAO 11781 10938 11499	RN/L =	BETAO 10711 10582 11672 00202	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	BETA0 11185 11753 10642
	1109.	. 114/ 0	BETAC 03158 03386 03861	. 115/ 0	BETAC 02656 03132 04008 00288	. 116/ 0	BETAC 02629 03335 03876 00272	ARC		# 1109. # 375.	. 121/0	BETAC 02403 02869 03801 00321
REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 04 1 2 . 4 14 4 . 392 GRAD IENT	RUN NO.	ALPHAC 177 2.432 4.435 GRADIENT	RUN NO	ALPHAC 134 2 . 347 4 . 450 GRADIENT		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	PUN NO.	ALPHAC .038 2.411 4.319 GRAD IENT
REFE	2690.0000 474.8100 935.6800		02 14.874 14.967 14.923		DZ 29.907 29.803 29.693		02 44.786 45.057 44.45		REFER	2690.0000 474.8100 936.6800		02 3.209 3.176 3.398
	SREF = LREF = BREF = SCALE =									SREF = LREF = BREF = SCALE =		

DATE 22 MAR			SREF LREF * ; BREF * ;		ORIGI OF PO	NA OOI	L PAGE I	is Yi		SREF = LREF = BREF = SCALE =				
AR 76		REFERE	2690.0000 9 474.8100 1 936.6800 1		02 7.586 7.752 7.261		02 10.180 9.988 10.110		REFER	2690.0000 474.8100 935.6800		02 3.093 3.006 3.460		02 7.217 7.234 7.234
TABULATED		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 026 2 . 399 4 . 448 GRADIENT	RUN NO.	AL PHAC - 156 2.439 4.458 GRADIENT		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC . 127 2.255 4.338 GRADIENT	RUN NO	ALPHAC 139 2 . 360 2 . 367 9 . 367 6RADIENT
TED SOURCE DATA	ARC 1		* 1109.00 * .00 * 375.00	122/ 0	BETAC 02811 03271 03798 0020	123/ 0	BETAC 02594 03357 03737	ARC 14-120(CA23B)		= 1109. = 375.	. 131/0	BETAC 01363 02297 02211	132/ 0	BETAC 01465 01885 02036
DATA - CA23B	14-120(CA238)		0000 IN. YO 0000 IN. YO 0000 IN. ZO		BETA0 11292 11194 09920	.78115 .48964 11.04783 -	BETA0 11073 11282 10592			0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	BETAO 10041 10209 08994	RN/L .	BETAO -,10535 -,09890 -,09513
33	747/1			3.34 GRA	PHIC -47.68780 .78115 .48964 11.04783		PH1C -9.45049 .78898 .48077	1/247			3.34 GR	PHIC 6.1081+ .58365 .2922+ -1.38557	3.34 CR	PH1C -6.02567 .45777 .26739
	AT1 0251 (OR			GRADIENT INTERVAL	PH10 1.05177 .77121 .55069 11211		PH10 1.04900 77720 58516 -10073	AT1 0251 (0F			GRADIENT INTERVAL	PHIO . 95072 . 72488 . 50356 10619	GRADIENT INTERVAL	PH10 1.00523 .68905 .53220
	(ORBITER DATA)			VAL = -5.00,	CA .03786 .02799 .01865	.VAL = -5.00	CA .0 ⁷ 905 .02850 .01838	(ORBITER DATA)			r Č	CA .03942 .02998 .01970 00468	ء ئ	CA .04005 .02961 .01960 00452
			BETA = RUDDER = 10RB = DY	00'2'/0	CN .31091 .36978 .43761 .02820	0/ 5.00	CN .30563 .36753 .44824 .03036			BETA = RUDDER = 10RB = DY	.00/ 5.00	CN .30455 .35773 .43122 .03006	.00/ 5.00	CN .30511 .36564 .43890
	(DNH012)	PARAMETR1C	. 000 . 000 6. 000		CSL 00069 00083 00095 00006		CSL 00096 00103 00103	(DNH013)	PARAMETRIC	.000 .000 6.000 .000		CSL 00033 00024 00033		CSL 00032 00042 00041
PAGE	(08 OCT	DATA	STAB = ELEVON = DX = MACH =		CLN .00131 .00135 .00104 00006		CLN .00132 .00127 .00083	80)	DATA	STAB E ELEVON E DX MACH E		CLN .00106 .00113 .00084		. 00112 . 00113 . 0084 . 00006
203	1 75 J		-1.000 5.000 .000 .600					000 75 1		 				

F 204	1 75)		000.000.000.000.000.000.0000.0000.0000.0000										
PAGE	13) (08 OCT	DATA	STAB # ELEVON = DX MACH =		CLN .00128 .00101 .00085		CLN .00110 .00099 .00073		CLN .00109 .00096 .00080		CLN .00103 .00095 .00057		CLN .00103 .00095 .00055
	(DNH013)	PARAMETRIC			CSL 00047 00056 00058 00003		CSL 00056 00059 00077 00077		CSL 00089 00083 00085		CSL 00057 00077 00067		CSL -,00053 -,00051 -,00044
	_		BETA RUDDER RIORB R	.00/ 5.00	CN .30512 .36931 .4241 .02948	.00/ 5.00	CN .30505 .37125 .45062	.00/ 5.00	CN .30896 .38496 .46762	.007 5.00	CN .30498 .38833 .48100 .03871	00.5 /00	CN .30334 .39244 .48705
	ATI 02SI (ORBITER DATA)			K L	CA .04054 .02930 .01957 00453	ı. R	CA .04096 .03035 .01978 00455	ii C	CA .04181 .03084 .02070 00472	i,	CA . 04304 . 03145 . 02096 00487	H FL	CA .04393 .03227 .02125 00500
				GRADIENT INTERVAL	PH10 .99648 .60332 .49039	GRADIENT INTERVAL	PH10 .93377 .66058 .50485	GRADIENT INTERVAL	PH10 .92147 .63439 .54824 08517	GRADIENT INTERVAL	PH10 .83074 .63200 .48762	GRADIENT INTERVAL	PH10 .88566 .63379 .48464 08916
CA23B	38) 747/1			3.33 GA	PHIC -4.11140 .44820 .28959	3.35 GR	PHIC -6.58827 .49354 .30774 1.54547	3.35 GR	PHIC -24.55400 .72761 .46506 5.81839	3.35 GR/	PH1C -30.15350 .77705 .46476 6.98692	3.35 GR/	PHIC -26.61570 -77048 -47934 6.17858
ı	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	BETAO -,10377 -,08719 -,08783	08783 .00362 .RV/L =	BETAO 09798 09538 09119	RN/L =	BETAO 09840 09207 09852	RN/L =	BETAO08807091490881300007	RN/L *	BETAO 09393 09205 08744 .00141
TABULATED SOURCE DATA	ARC		= 1109. = 375.	0. 133/ 0	BETAC 01706 01882 02200	0. 134/ 0	BETAC 02211 02076 02383 0033	0. 135/ 0	BETAC 02869 03091 03562 00152	0. 136/ 0	BETAC 02818 03322 03625 00179	1. 137/ 0	BETAC 02860 03271 03731
TABU		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RCN NO	ALPHAC 237 2.407 4.371 GRADIENT	RUN NO	ALPHAC 191 2.411 4.441 GRADIENT	RUN NO	ALPHAC 063 2.435 4.393 GRADIENT	RUN NO	ALPHAC 049 2.450 4.474 GRADIENT	RUN NO	ALPHAC 057 2.433 4.464 GRADIENT
MAR 76		REFERE	2690.0000 2 474.8100 1 936.6800 1 35.03		DZ 10,116 9.960 9.890		02 15.175 14.756 15.038		02 30.192 29.830 29.948		02 44.708 44.452 44.667		02 50.164 50.275 50.038
DATE 22 P			SREF "LREF" BREF "SCALE "										

205	1 75 1		5.000 5.000 10.000												
PAGE) (08 OCT	DATA	STAB # ELEVON # DX # MACH #		CLN .00119 .00098 00011		CLN .00117 .00094 00009		CLN .00105 .00089		CLN .00107 .00086 00009		CLN .00103 .00070 00014		CLN .00111 .00051
	(DINHO)	PARAME TRIC	.000 .000 .000 .000		CSL 00004 00027 00012		CSL 00033 00038 00002		CSL 00049 00041 .00003		CSL 00036 00058		CSL 00069 00088 00008		CSL 00056 00071 00006
			BETA ** RUDDER ** 10R8 ** DY **	00.5.00	CN .35828 .42005 .03174	.007 5.00	CN .36614 .42883 .02648	10/ 5.00	CN .36776 .43485 .02731	10/ 5.00	CN .36913 .44243 .03045	.00/ 5.00	CN .38204 .46704 .03549	5.00/ 5.00	CN .38349 .48689 .04251
	(ORBITER DATA)			VAL = -5.00/	CA .03046 .02145 00463	ii R	CA . 03037 . 02096 00398	WAL = -5.00/	CA . 03059 . 02066 00404	100.8 = -5.00/	CA .03144 .02127 00423	ι, I	CA .03195 .02099 00458	,	CA .03264 .02066 00492
	AT1 0251 (OR			GRADIENT INTERVAL	PHIO .42703 .32308 05341	GRADIENT INTERVAL	PH10 .45795 .35723 04254	GRADIENT INTERVAL	PH10 .36992 .31845 02095	GRADIENT INTERVAL	PH10 . 44604 . 28556 06665	GRADIENT INTERVAL	PH10 .45433 .27580 07454	GRADIENT INTERVAL	PH10 .42896 .29070 05684
38	1747			3.33 GRA	PH1C .31988 .20685 05808	3.32 GRA	PHIC .41998 .20349 09144	3.32 GRA	PHIC . 28014 . 18696 03792	3.31 GRA	PHIC .46894 .26641 08412	3.31 GR/	PHIC .82332 .41164	3.30 GR	PHIC .83988 .42924 16883
DATA - CA238	14-120(CA23B)		.0000 IN. XO .0000 IN. YO	RN/L =	BETAO 06053 05714	RN/L =	BETAO -, 06404 -, 06314 -, 00038	RN/L =	BETAO 05199 05694 00202	RN/L =	BETAO 06263 05095	RN/L =	BETA0 -,06409 -,04940	RN/L *	BETAO 06037 05230
ATED SOURCE	ARC		= 1109	. 141/0	BETAC 01280 01529	0 145/ 0	BETAC 01416 01526 00046	1, 143/ 0	BETAC 00951 01435 00197	0 /441 0	BETAC 01610 02033 00175	0. 145/ 0	BETAC 02870 03153 00118	0. 146/ 0	BETAC 02928 03316
TABULATED		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 2.292 4.239 GRADIENT	RUN NO	ALPHAC 1.933 4.300 GRADIENT	RUN NO	ALPHAC 1.946 4.403 GRADIENT	RUN NO	ALPHAC 1.968 4.376 GRADIENT	RUN NO	AL PHAC 1.997 4.392 GRADIENT	RUN NO.	ALPHAC 1.998 4.430 GRADIENT
2 MAR 75		REFEREN	2690.0000 474.8100 936.6800		0.2 3.324 3.528		02 7.340 7.097		02 10.137 9.825		02 14.831 14.775		02 30.007 29.873		02 44.854 44.891
Ų.	!		H H H H												

DATE 22

(08 OCT 75) (DNH014) ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA) TABULATED SOURCE DATA - CA23B

·	5.000 10.000 .600			175)		5.000 10.000 .600								
DATA	STA ELE DX MAC		CLN .00078 .00056	5) (08 OCT	ATA	STAB = ELEVON = DX = MACH =		CLN .00074 .00004 00036		CLN .00079 00003		CLN .00063 00039		CLN .00051 00032
PARAMETRIC			CSL 00057 00051	(DNH015)	PARAMETRIC	8.000 8		CSL 00036 00015		CSL 00041 00045 00002		CSL 00065 00032		CSL 00068 00031
	BETA RUDDER RIORB R	5.00/ 5.00	CN .39160 .48446 .03898	•		BETA = RUDDER = 10RB = DY	.00/ 5.00	CN .47831 .55854 .04111	5.00/ 5.00	CN .48229 .57226 .03710	00/ 5.00	CN .48734 .58194 .03913	.007 5.00	CN . 50434 . 60916 . 04288
•			CA .03246 .02102 00480	(ORBITER DATA)			1 1	CA .01850 .00962 00461	i N	CA .01867 .00951 00378	ж Ю	CA .01914 .01023 00368	it.	CA .02003 .01143 00352
		GRADIENT INTERVAL	PH10 .39168 .29200	AT1 0251 (0			GRADIENT INTERVAL	PH10 .31121 .26196 02523	GRADIENT INTERVAL	PH10 .29782 .26759 01246	GRADIENT INTERVAL	PHI0 .25921 .22228 01528	GRADIENT INTERVAL	PH10 .33936 .24052 04044
		3.30 GR	PHIC . 89046 . 43278 -, 19214	747/1			3.30 GR	PHIC .36584 .28710 04035	3.29 GR	PHIC .45446 .27085 07571	3.29 GR	PHIC .56414 .28886 11388	3.29 GR	PH1C .84898 .45306 16197
	.0000 IN. XO .0000 IN. YO .0000 IN. ZO	RN/L =	BETAO 05552 05247 .00128	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	BETAO -,05552 -,05594 -,00021	RN/L =	BETAO 05238 05759	RN/L =	BETAO 04574 04780 00085	RN/L =	BETAO 05990 05189
	# 1109 # 375	0. 147/ 0	BETAC 03183 03343 00067	ARC		1109.	0. 151/ 0	BETAC 01539 02184 00330	0. 152/ 0	BETAC 01620 02110 00202	0. 153/ 0	BETAC 02047 02265). 154/ 0	BETAC ~.03036 ~.03550 ~.00210
REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 2.049 4.431 GRADIENT		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 2.410 4.362 GRADIENT	RUN NO	ALPHAC 2.043 4.469 GRADIENT	RUN NO	ALPHAC 2.079 4.497 GRADIENT	RUN NO	ALPHAC 2.049 4.493 GRADIENT
REFERE	2690.0000 474.8100 936.6800 0125		02 50.387 50.182		REFERE	2690,0000 S 474,8100 1 936,6800 1		02 7.261 7.540		02 9.896 10.215		02 14.806 14.750		02 30 . 131 30 . 087
	SREF = LREF = BREF = SCALE =					SREF = LREF = BREF = SCALE =								·

207	15)			5.000 10.000 .600					1 75)		5.000 5.000 20.000						
PAGE) (08 OCT	DATA		SIAB ELEVON # DX MACH #		CLN .00037 00017 00022		CLN .00036 00040 00032	6) (08 OCT	DATA	STAB = ELEVON = DX = MACH =		CLN .00113 .00098 00008		CLN .00129 .00109		CLN . 00114 . 00099
	(DNH015)	PARAMETRIC	1	000. 000. 8		CSL 00088 00039 .00020		CSL 00062 00026	(DNH016)	PARAME TRIC	000.		CSL 00023 00038 00008		CSL 00048 00061 00005		CSL 00056 00065 00004
		_		BETA # RUDDER # 10RB # DY	. 2.00 .	CN .50263 .62177 .04932	0/ 5.00	CN .50562 .62291 .04972			BETA = RUDDER = 10RB = DY	00/ 5.00	CN .36105 .42262 .03278	00/ 5.00	CN .36709 .43402 .02722	.00/ 5.00	CN .36972 .43416 .02582
	(ORBITER DATA)				/AL = -5.00/	CA .02079 .01201 00363	VAL = -5.00/	CA .02091 .01240 00361	(ORBITER DATA)			" Ř	CA .03289 .02369 00490	. = -5.	CA .03242 .02239 00408	ERVAL = -5.	CA . 03231 . 02269 00385
	0251				GRADIENT INTERVAL	PH10 .26416 .23069 01386	GRADIENT INTERVAL	PH10 .26268 .23415 01210	AT1 0251 10R			GRADIENT INTERVAL	PH10 .23156 .25269 .01125	GRADIENT INTERVAL	PH10 .27945 .21866 -,02473	GRADIENT INTE	PH10 .29275 .20339 03340
82.0) 747/1 AT!				3.29 GRAD	PHIC .93043 .46906 19100	3.29 GRAI	PHIC .98066 .48742 20906	1/247	ı		3.29 GR/	PHIC . 27527 . 23431 02180	3.28 GR	PHIC .44088 .25198 07683	3.31 GR	PHIC .41286 .25891
DATA - CA238	0			0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	BETA0 -, 04639 -, 04968 -, 00136	RN/L =	BETAO 04601 05004 00171	14-120(CA23B)		.0000 IN. XO .0000 IN. YO .0000 IN. ZO	RN/L =	BETAO 03333 04504 00623	RN/L *	BETAO 03938 03932	RN/L =	BETAO 04140 03759
TED SOURCE	ARC			= 1109. = 375.	. 155/ 0	BETAC 03319 03648 00136	. 156/ 0	BETAC 03450 03719	Q) Ē	= 1109. = 375.	0. 161/ 0	8000	NO. 162/ 0	BETAC 01557 01969 00168	NO. 153/ 0	BETAC 01433 02025 00237
TABIRATED			E DATA	FT. XMRP YMRP ZMRP	RUN NO	ALPHAC 2.044 4.460 GRADIENT	NON NO	ALPHAC 2.016 4.375 GRADIENT		i	REFERENCE DATA 0000 SQ.FT. XMRP 8100 IN. YMRP 6800 IN. ZMRP 0125	ON N	ALPHAC 2.461 4.340 GRADIENT	202	ALPHAC 2.024 4.482 GRADIENT	S N	ALPHAC 1.989 4.485 GRADIENT
Ç T			REFERENCE DATA	2690.0000 SQ.F. 474.8100 IN. 936.6800 IN. .0125		02 44.833 45.102		02 50.292 50.425			REFEREI 2690.0000 S 474.8100 1 936.6800 1		02 2.997 3.241		02 7.114 7.110		DZ 10.110 9.502
	מאוד ממ יואט			SREF = 2 LREF = BREF = SCALE =							SREF = CREF = CR						

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ARC 14-120(CA23B) 747/1 ATI 02SI (ORBITER DATA)

(DNH016) (08 OCT 75)

	5.000 5.000 600.000								
, DATA	STAB ELEVON BOX		CLN .00112 .00088		CLN 00109 00077		CLN .00099 .00066		CLN .00103 .00059
PARAMETRIC	000.9		CSL 00066 00088		CSL 00098 00079		CSL 00076 00097 00009		CSL 00071 00088 00007
	BETA RUDDER RIONB R	-5.00/ 5.00	CN .37800 .44005 .02888		CN . 38230 . 46542 . 03412	00/ 5.00	CN .38518 .48115	30/ 5.00	CN .38451 .48701 .04107
			CA .03153 .02269 00412	RVAL = -5.00/	CA . 03222 . 02171 00+31	RVAL = -5.00/	CA . 03277 . 02127 00471	RVAL = -5.00/	CA .03334 .02128 00483
		GRADIENT INTERVAL .	PH10 .24571 .25025 .00211	GRADIENT INTERVAL =	PH10 .26398 .16541 04046	GRADIENT INTERVAL	PH10 .28957 .21740 02959	GRADIENT INTERVAL	PHIO. 25207 21516 01479
	0.00	3.30 GR	PHIC .49453 .32759 07770	3.31 GR	PHIC .83991 .42727	3.30 GR	PHIC .91065 .47457 17881	3.30 GR	PHIC .89420 .47518 16791
	0000 1N. YO .0000 1N. XO .0000 1N. XO .375.0000 1N. ZO	RN/L =	BETAO 03531 04432 00419	RN/L =	BETAO 03728 02971	RN/L *	BETAO 04071 03905 .00068	RN/L =	BETAO 03538 03895
	14 M M	0. 164/ 0	BETAC 01853 02454 00280	0. 165/ 0	BETAC -,02941 -,03310 -,00151	0. 166/ 0	BETAC 03180 03674 00202	0. 167/ 0	BETAC 03094 03710 00247
REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 2.147 4.296 GRADIENT	RUN NO.	ALPHAC 2.006 4.442 GRADIENT	RUN NO.	ALPHAC 2.001 4.440 GRADIENT	RUN NO.	ALPHAC 1.983 4.478 GRADIENT
REFER	2690.0000 9474.8100 1935.6800 1		DZ 14.885 14.669		02 29.970 29.738		05 44.740 44.620		DZ 50.218 50.509
	SREF # LREF # BREF # SCALE #								

509	(27 1		5.000 5.000 20.000 .600												
PAGE	1) (08 OCT	DATA	STAB = ELEVON = DX = MACH =		CLN .00077 00004 00039		CLN .00081 00008 00037		CLN .00076 00012 00037		CLN .00067 00023		CLN .00028 00023 00022		CLN .00044 00023
	(DNH017)	PARAMETRIC	.000 .000 .000 .000		CSL -,00078 -,00033		CSL 00071 00061 .00004		CSL 00109 00070		CSL 00091 00086		CSL 00085 00095		CSL 00082 00091
			BETA # RUDDER # IORB # DY #	.00/ 5.00	CN .47382 .55741 .04002	0/ 5.00	CN .480 58 .55863 .0328 2	.00/ 5.00	CN .48257 .56674 .03585	00/ 5.00	CN .49286 .59560 .04276	30/ 5.00	CN .50440 .61672 .04867	00/ 5.00	CN .50254 .61458
غ	(ORBITER DATA)			# 12	CA . 02051 . 01073 00468	IVAL = -5.00	CA . 02029 . 01137 00375	# #	CA . 02039 . 01138 00384	7VAL = -5.0	CA . 02104 . 01199 -, 00376	RVAL = -5.00	CA .02053 .01218 00362	" .5.	CA .02116 .01263 00382
	AT1 0251 (OR			GRADIENT INTERVAL	PH10 . 29786 . 17796 05741	DIENT INTERVAL	PH10 .25469 .20389	GRADIENT INTERVAL	PH10 . 25118 . 19334 02464	GRADIENT INTERVAL	PH10 .22154 .23681 .00636	GRADIENT INTERVAL	PH10 .21860 .20806 00457	GRADIENT INTERVAL	PH10 .20281 .19570 00319
38	1747/1			3.31 GRA	PHIC . 55574 . 38562 08146	3.32 GRADI	PHIC .69824 .36783 13896	3.33 GR	PHIC .77345 .37080 17151	3.32 GR	PHIC .98158 .54644 18111	3.32 GR	PHIC .96560 .52387 19141	3.32 GR	PHIC .97366 .50080
DATA - CA23B	14-120(CA23B		.0000 IN. YO	RN/L =	BETAO 05280 03816	RN/L =	BETAO 04476 04339	RN/L #	BETAO 04430 04124 .00130	RN/L =	BETAO 03893 05055 00484	RN/L =	BETAO 03866 04473 00263	RN/L =	851A0 03588 04182 00266
ATED SOURCE DATA	ARC		# 1109 # 375	0. 171. 0	BETAC 02250 02964 00342	0 /571 .0	BETAC 02424 02801 00159	0. 173/ 0	BETAC 02756 02838 00035	0, 174/ 0	BETAC 03417 04190	NO. 175/ 0	BETAC 03555 04035 00208	NO. 176/ 0	BETAC 03598 03800
TABULATED		REFERENCE DATA	SQ.FI. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 2.320 4.409 GRADIENT	RUN NO	ALPHAC 1.989 4.367 GRADIENT	RUN NO	ALPHAC 2.042 4.390 GRADIENT	RUN NO	ALPHAC 1.994 4.397 GRADIENT	RUN	ALPHAC 2.109 4.417 GRADIENT	NUN N	AL PHAC 2.118 4.352 GRAD1ENT
1AR 76		REFEREN	2690.0000 SC 474.8100 IN 936.6800 IN		DZ 7.409 7.682		02 10.200 9.876		07 14.980 14.840		02 30.168 29.810		02 44.854 45.244		02 50.344 50.595
DATE 22 MAR			SREF = LREF = BREF = SCALE =												

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TABULATED SOURCE DATA - CA238

סי אאון	ABOL	ABULATED SOURCE DATA	۲	CA23B					PAGE	E 210	
		ARC	14-120(CA23B)	747/1	AT1 0251 (O	02S1 (ORBITER DATA)	_	(ONHO) B	B) (08 OCT	1 75)	
REFER	REFERENCE DATA							PARAMETRIC	DATA		
2690.0000 474.8100 936.6800	SQ.FT. XMRP IN. YMRP IN. ZMRP	± 1109 = 375	0.0000 IN. XO 0.0000 IN. YO 0.0000 IN. ZO	0.00			BETA BRUDDER BIORB BOY	.000 .000 6.000	STAB = ELEVON = DX MACH =	5.000 5.000 .000 .600	
	RUN NO.	. 181/ 0	RN/L =	3.32 GR	GRADIENT INTERVAL	ii iù	.00/ 5.00				
02 3.378 3.590	ALPHAC 2.472 4.405 GRADIENT	BETAC -,05330 -,04626 .00364	BETAO 04653 03533	PHIC 1.23581 .60218 32765	PH10 .32090 .19618 06449	CA .02798 .01811	CN .37197 .43960 .03497	CSL 00392 00661 00139	CLN .00017 .00021		
	RUN NO.	. 182/ 0	RN/L =	3.31 GR	GRADIENT INTERVAL	ا . ا	.00/ 5.00				
02 7.711 7.202	ALPHAC 2.009 4.378 GRADIENT	BETAC 04982 03609 .00579	BETAO 03557 04085 00223	PHIC 1.42106 .47278 40024	PH10 .25146 .22910 00944	CA . 02932 . 01901 00435	CN .37676 .44424 .02848	CSL 00295 00526 00098	CLN .00029 .00027		
	RUN NO.	. 183/ 0	RN/L =	3.31 GR	GRADIENT INTERVAL	ı.	.00/ 5.00				
02 9.911 10.102	ALPHAC 2.005 4.475 GRADIENT	BETAC 04669 02745	BETAO 04412 02597 .00735	PHIC 1.33418 .35177 39775	PH10 .31295 .14366 06854	CA . 02980 . 01862 00453	. 37558 . 45564 . 03241	CSL 00293 00484 00077	CLN .00049 .00012		
	RUN NO.	0 /481 .	RN/L =	3.33 GR/	GRADIENT INTERVAL	7VAL = -5.00	10/ 5.00				
02 14.973 14.736	ALPHAC 2.102 4.362 GRADIENT	BETAC 03302 01495	BETAO 03984 03269	PHIC .90033 .19656 31129	PH10 .27916 .18330 04240	CA .03002 .01983 00451	CN . 38091 . 45554 . 03301	CSL 00280 00396 00051	CLN .00063 .00028 00015		
	RUN NO.	. 185/ 0	RN/L =	3.33 GR/	GRADIENT INTERVAL	*VAL = -5.00	0/ 5.00				
02 29.716 29.761	ALPHAC 2.100 4.335 GRADIENŢ	BETAC 00154 .01266 .00636	BETAO 04508 04340 .00075	PH1C .04202 16756 09378	PH10 .31743 .24384 03293	CA . 03183 . 02144 00465	CN . 38424 . 46976 . 03827	CSL 00201 00273 0032	CLN .00084 .00043		
	RUN NO.	. 186/ 0	RN/L =	3.32 GR	GRADIENT INTERVAL	VAL ± -5.00/	0/ 5.00				
02 44.733 44.856	ALPHAC 1.972 4.308 GRADIENT	BETAC 00480 .00046	BETAO 04216 03500 .00307	PHIC .13937 00608 06227	PH10 .30126 .19694 04470	CA . 03319 . 02192 00482	CN .38695 .48335 .04127	CSL 00153 00192 00017	CLN .00091 .00047		

211	75)		5.000			1 57		5.000 5.000 .000 .600								
PAGE	3) (08 OCT	DATA	STAB # ELEVON # DX # MACH #		CLN .00093 .00037 00023	9) (08 OCT	DATA	STAB * ELEVON * DX ** MACH **		CLN .00003 .00016		CLN .00013 .00001		CLN .00030 00003		CLN .00036 00023
	(DNH018)	PARAMETRIC	.000 .000 6.000 10.000		CSL 00128 00171 00018	610HNO)	PARAMETR1C	.000 .000 .000 .000		CSL 00392 00558 00084		CSL 00339 00479 00063		CSL -, 00252 -, 00371 -, 00048		CSL 00175 00217
		_	BETA ** RUDDER ** 10RB ** DY	7 5.00	CN .38615 .49147 .04435			BETA = RUDDER = 10R8 = DY	07 5.00	CN . 49339 . 58040 . 04405	00/ 5.00	CN .49501 .57490	.00/ 5.00	CN .48665 .58666 .04082	.00/ 5.00	CN .49778 .61006 .04698
	ORBITER DATA)			/AL = -5.00/	CA .03365 .02139 00516	(ORBITER DATA)			VAL = -5.00	CA . 01696 . 00866 00420	= -5.	CA . 01732 . 00965 00350	RVAL = -5.0	CA .01944 .01044 00367	5.	CA .02040 .01217 00344
	T1 0251 (ORB			GRADIENT INTERVAL	PH10 .33765 .28566 02189	A11 0251 (ORE			GRADIENT INTERVAL	PH10 .17717 .11826 02983	GRADIENT INTERVAL	PH10 .15535 .10619 02241	ADIENT INTER	PH10 .20068 .14293 02357	GRADIENT INTERVAL	PH10 .15917 .11458 01866
æ	747/1 A			3.32 GRAE	PHIC . 29428 . 08622 08761	1747/1			3.32 GRA	PHIC .90077 .20895 35027	3.32 GRA	PHIC .91320 .13473 35487	3.32 GRA	PH1C . 67824 02949 28887	3.32 GR/	PHIC -,33535 -,39659 -,02563
DATA - CA23B	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L = 3	BETAO 04737 05131 00166	14-1201CA23B		. 0000 IN. XO . 0000 IN. YO . 0000 IN. ZO	RN/L =	BETAO 03168 02537	RN/L =	BETAO 02745 02251 .00226	RN/L *	BETAO 03502 03061 .00180	PN/L =	851AO -,02737 -,02455 .00143
TED SOURCE DATA	ARC :		1109.00 	0 /181	BETAC 01038 00661	ARC		# 1109 = 375	. 191/0	BETAC 03781 01596	0 /261 0	BETAC 03372 01013	0. 1937 0	BETAC 02325 .00227	0. 194/ 0	BETAC .01179 .03046 .00781
TABULATED		SE DATA	FT. XMRP YMRP ZMRP	RUN NO	ALPHAC 2.021 4.396 GRADIENT		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 2.405 4.380 GRADIENT	NO NO	ALPHAC 2.116 4.310 GRADIENT	RUN NO	ALPHAC 1.964 4.414 GRADIENT	ON NO	ALPHAC 2.014 4.404 GRADIENT
R 76		REFERENCE DATA	2690.0000 SQ.F. 474.8100 IN. 936.6800 IN.		02 49.952 50.410		REFEREN	2690.0000 SQ 474.8100 IN 936.6800 IN		02 7.491 7.844		02 9.818 9.759		DZ 14.864 15.018		DZ 30.225 30.105
DATE 22 MAR			SREF * 2 LREF * 2 BREF * SCALE *					SREF = ; LREF = ; SCALE *								

ORIGINAL PAGE IS OF POOR QUALITY

5.000 .000 .000 .600 CLN .00082 .00098 .00098 CLN .00082 .00097 .00098 STAB ELEVON : DX MACH : 000. CSL -.00102 -.00115 -.00085 CSL -.00113 -.00109 -.00106 BETA RUDDER : TORB : .11551 .17505 .23611 .02869 CN .11998 .18089 .24151 GRADIENT INTERVAL = -5.00/ 5.00 = -5.00/ 5.00 CA .04686 .03860 .02932 CA .04713 .03846 .02923 GRADIENT INTERVAL PH10 1.27147 .63585 .63581 -.15293 PHIO .93772 .69653 .55830 .0844 PH1C 26.67240 .78482 .45546 -6.30867 PHIC -6.78415 .75071 .46391 1.68783 3.32 BETAO -.08876 -.06736 -.09060 BETA0 -.06478 -.07644 -.07960 RN/L . RN/L * 0 0 /0 BETAC -.02828 -.03056 -.03382 BETAC -.02757 -.03173 -.03467 PUN NO. RUN NO. AL PHAC .056 2.231 4.258 GRADIENT AL PHAC -.232 2.422 4.286 6RAD IENT 0**2** 2.999 2.972 3.376 02 7.356 7.305 7.176

TABULATED SOURCE DATA - CA238	
TABULATED SOURCE DATA - CA238	
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TABULATED SOURCE DATA - CA23B	
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PAGE 213	0) (2) OCT 75)	DATA		ELEVON = .000 DX = .000 MACH = .600		CLN .00101 .00105 .00110		CLN . 00090 . 00097 . 00092		CLN .00085 .00078 .00083		CLN .00081 .00081 .00076
	(DNH050)	PARAMETRIC	000	000.4		CSL 00134 00132 00094 .00008		CSL 00149 00126 00103		CSL 00160 00138 00142		CSL 00142 00147 00135
			BFTA =	RUDDER # 10RB # DY	0/ 5.00	CN . 12146 . 18730 . 24615 . 02700	00/ 5.00	CN . 12499 . 19292 . 25573 . 02896	00/ 5.00	CN .12024 .20333 .27614 .03358	00/ 2.00	CN 11990 21261 29126 03726
	(ORBITER DATA)				VAL = -5.00/	CA .04744 .03838 .02907 00397	NAL = -5.00/	CA . 04749 . 03879 . 02933 00401	AVAL = -5.00/	CA .04946 .04017 .02959 00426	RVAL = -5.00/	CA . 05005 . 04036 . 02958 00443
	0251				GRADIENT INTERVAL	PH10 1.10478 .79993 .52700	GRADIENT INTERVAL	PH10 1.07213 .67795 .52958	GRADIENT INTERVAL	PH10 1.10106 .65328 .54419	GRADIENT INTERVAL	PH10 1.07283 .67953 .45726
38	3B) 747/1 AT!				3.32 GRA	PHIC -9.30004 .81997 .43602 2.19562	3.31 GR	PHIC -20.23330 .73837 .41119 4.74688	3.30 GR	PHIC -11.64240 .78744 .44661	3.30 GR	PH1C -16.70720 .80009 .46734 3.88044
DATA - CA23B	ARC 14-120(CA23B)		:	00000 IN. XO 00000 IN. XO 00000 IN. XO	RN/L =	9ETAO 07750 08742 07630	FN/L =	BETAO 07640 07495 07672	RN/L =	BETAO 07696 07190 07954	RN/L =	BETAO 07540 07541 06670
TED SOURCE DATA	ARC			= 1109.0000 = 00000 = 375.0000	0 /0	BETAC 03105 03424 03357 00058	0 /0 .	BETAC 02818 03134 03172	0 /0 .	BETAC 03287 03327 03485	0 00	BETAC 03181 03453 03660
TABULATED		BEFFRENCE DATA		SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	AL PHAC 190 2.393 4.416 GRADIENT	NON NO	ALPHAC 076 2.433 4.425 GRADIENT	RUN NO	AL PHAC 160 2.421 4.475 GRADIENT	RUN NO	ALPHAC 106 2.474 4.486 GRADIENT
DATE 22 MAR 75		41001100		SREF = 2690.0000 SQ. LREF = 4.74.8100 IN. BREF = 936.6800 IN. SCALE = .0125		02 9.998 9.822 9.715		02 14.608 14.941 14.567		07 29.742 29.812 29.770		20 14. 518 562 + 44
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	B -	DATA	STAB ELEVON EDX MACH		CLN .00098 .00098 .00098		CLN .00101 .00094 .00088		CLN .00088 .00105 .00077		CLN .00088 .00088 .00085		CLN .00081 .00085 .00082
	(LADAROC)	PARAMETR1C			CSL 00100 00102 00090		CSL 00124 00103 00106	•••	CSL 00127 00111 00111		CSL 00157 00124 00105		CSL 00139 00149 00117
_			BETA * RUDDER * TORB * DY	-5.00/ 5.00	CN .11437 .16872 .23373 .02856	.00/ 5.00	CN . 11889 . 17505 . 23911	.00/ 5.00	CN 11227 18204 24614 02857	00/ 5.00	CN 12319 18825 25380 02916	00/ 5.00	CN .12087 .20160 .27182
(1000)				N	CA .04480 .03725 .02781 00407	" rb	CA . 04544 . 03721 . 02776 00391	ii R	CA .04637 .03707 .02758 00400	RVAL = -5.00/	CA .04610 .03756 .02809 00401	RVAL = -5.00/	CA .04809 .03875 .02909
747/1 ATI 0251				GRADIENT INTERVAL	PH10 1.29997 90716 .69789	GRADIENT INTERVAL	PH10 1.37286 .98064 .69583 15128	GRADIENT INTERVAL	PH10 1.5012 3 .84124 .64781	GRADIENT INTERVAL	PHIO 1.34952 .82381 .71611	GRADIENT INTERVAL	PH10 1,32218 .79014 .61393 15883
			000	3.34 GF	PH1C 6.95086 .78797 .46166	3.33 GR	PHIC -10.84500 .74259 .44740 .5.61793	3.33 GR	PHIC -5.03962 .72762 .41610 1.22074	3.32 GR	PHIC -23.82030 .64047 .41987 5.64106	3.33 GR	PHIC -9,85063 .73818 .43980 2.37265
ARC 14-120(CA23B)			9.0000 IN. XO .0000 IN. YO 5.0000 IN. ZO	RN/L =	BETAO 09381 09682 10020	RN/L =	BE TAO 09799 10688 10016	RN/L =	BETAO 10311 09252 09419	RN/L =	BETAO 09691 09118 10412	RN/L =	BETAO ~ .09264 ~ .08775 ~ .0890100086
ARC			= 1109. = 375.	5. 211/ 0	BETAC 02110 03101 03504 00333). 212/ 0	BETAC 02421 03108 03397 00220). 213/ 0	BETAC 02234 03044 03202 00212	1. 214/ 0	BETAC 02282 02740 03224 00210	. 215/ 0	BETAC 02376 03203 03376 00226
	REFERENCE DATA	4 - 40 - 30 - 30 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 -	SQ.FT. XMRP IN. YMRP IN. ZMRP	NO. NO.	ALPHAC .173 2.255 4.353 GRADIENT	RUN NO	ALPHAC 126 2.399 4.355 GRADIENT	RUN NO	ALPHAC 253 2.398 4.413 GRADIENT	RUN NO	AL PHAC 052 2.452 4.403 GRADIENT	RUN NO	ALPHAC 137 2.487 4.402 GRADIENT
	BFFFR		2690.0000 S 474.8100 11 936.6800 11		02 3.110 3.078 3.099		02 7.673 7.105 7.181		DZ 9.888 10.133 9.989		DZ 14.808 14.795 14.946		DZ 29.743 29.755 29.747
			SCALE =										

E 215	1 75 1					OCT 75)		5.000 .000 .600						
PAGE	1) (08 OCT	DATA	STAB = ELEVON # DX # MACH =		CLN .00070 .00076 .00080	90	C DATA	STAB E ELEVON E DX E		CLN .00077 .00062 00019		CLN .00086 .00061 00021		CLN .00065 .000065 .00002
	(DNH021)	PARAME TRIC	0000		CSL 00126 00146 00102	(DNHO22)	PARAME TR10	000°. 8.000°		CSL 00121 00109 00090		CSL 00131 00141 00114		CSL 00141 00127 00114 .00006
			GETA = RUDDER. = 10RB = DY	00.5 /0	CN . 12097 . 21684 . 28416 . 03678			BETA ERUDDER E	.00/ 5.00	CN .32685 .39939 .48740 .03820	00/ 5.00	CN .33226 .40375 .49095	.00/ 5.00	CN .32502 .41064 .49829 .03743
	(ORBITER DATA)			7VAL = -5.0	CA . 04928 . 03882 . 02960 00440	(ORBITER DATA)			1.	CA . 02374 . 01345 . 00483 00451	TERVAL = -5.0	CA . 02437 . 01412 . 00547 00425	F -5	CA . 02549 . 01372 . 00590 00427
	AT1 0251 (OF			GRADIENT INTERVAL	PHIO 1.17747 . 75098 . 67385	AT1 0251 (O			GRADIENT INTERVAL	PH10 .66443 .47319 .38018	GRADIENT INTE	PH10 .62331 .50567 .40184	GRADIENT INTERVAL	PH10 .56064 .47415 .40184
CA23B	1747/1			3.33 GR	PHIC -9.94159 .71032 .43911 2.476.5	747/1		000	3.31 GF	PHIC 5.69209 .48131 .28389 -1.30708	3.31 GF	PH1C -11,78550 .55746 .31698 2,85950	3.31 6	PH1C -6.77832 .49153 .32336 1.60755
SOURCE DATA - CA	ARC 14-1201CA23B		0000 IN. XO	RN/L =	BETAO 08265 08404 09687 00299	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	BETAO 09385 08436 08149	RN/L =	BETAO 08749 09099 08578	RN/L =	BETAO 07815 08579 08632
-	ARC		1109.	. 216/ 0	BETAC 01992 03157 03304 00308	ARC		# 1109. = 375.). <i>221/</i> 0	BETAC 01798 01994 02165). 222/ 0	BETAC 01987 02395 02393	o. 223/ 0	BETAC 01561 02126 02519
TABULATED		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 114 2.547 4.315 GRADIENT		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 180 2.374 4.374 GRADIENT	RUN NO	ALPHAC 095 2 . 462 4 . 329 GRADIENT	RUN NO	ALPHAC 131 2.479 4.467 GRADIENT
1AR 76		REFERE	2690.0000 Signal		02 44.499 44.499 94.47.44		REFERE	2690.0000 S 474.8100 1 936.6800 1		02 7.1.7 7.048 7.857		02 10.008 9.794 10.168		02 14.875 15.107 14.650
DATE 22 MAR			SREF = LREF = BREF = SCALE =					SREF = LREF = BREF = SCALE =						

CA23B
DATA
SOURCE
TABULATED
TAB

1 75)		5.000							. 25		5.000		
(08 OCT	: DATA	STAB FELEVON BOX DX MACH		CLN .00071 .00045 00014		CLN .00069 .00036 00010		CLN .00082 .00038 .00001	3) (08 OCT	DATA	STAB ELEVON BOX		CLN .00085 .00079 .00079
(DNH022)	PARAMETR1C			CSL 00143 00169 00122		CSL 00145 00140 00117		CSL 00134 00137 00023	(DNH023	PARAME TRIC			CSL 00078 00095 00120
-		BETA = RUDDER = 10RB = DY	.00/ 5.00	CN .32475 .42183 .52093 .04314	.00/ 5.00	CN .32186 .42688 .52934 .04666	00/ 5.00	. 32111 . 42298 . 53614			BETA RUDDER I IORB I DY	00.5 /00	CN .22545 .28941 .34827 .02835
(ORBITER DATA)			ء تل	CA .02690 .01443 .00728	i L	CA .02803 .01497 .00791	RVAL = -5.00	CA .02823 .01575 .00779	(ORBITEP DATA)			RVAL = -5.00/	CA . 03609 . 02523 . 01598 00465
AT1 0251 (0			GRADIENT INTERVAL	PH10 .66773 .49726 .39081	GRADIENT INTERVAL	FH10 .60103 .43776 .40592	GRADIENT INTERVAL	PH10 .62610 .42225 .43064	AT1 0251 (O			GRADIENT INTERVAL	PH10 .79878 .53695 .40989
147/1			3.31 GR	PHIC -10.98930 .66761 .42012	3.31 GR	PHIC -16,30560 ,75396 ,49188 4,02113	3.30 GR	PHIC -13.55440 .76282 .48180 3.19488	747/1			3.31 GR	73.32190 .48052 .32189 -7.94312
: 14-120(CA23B)		.0000 IN. YO	RN/L *	9ETAO 09274 09038 08373	FN/L =	BETAO -, 08365 -, 07930 -, 08637 -, 00045	RN/L #	BETAO 08725 07606 09256	14-120(CA238)		09.0000 IN. XO .0000 IN. YO 375.0000 IN. ZO	RN/L =	BETAO 08306 07840 07307
ARC		1109.	0, 224/0	BETAC 02533 02959 03194). 225/ 0	BETAC 02843 03315 03688 00191	0. 226/ 0	BETAC 02932 03269 03733	ARC		= "). 231/ 0	BETAC 01846 02078 02437 00135
	REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 130 2.540 4.360 GRADIENT	RUN NO	ALPHAC 097 2.520 4.300 GRADIENT	RUN NO	ALPHAC 122 2 . 456 4 . 443 GRADIENT		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC .028 2.478 4.342 GRADIENT
	REFER	2690.0000 474.8100 936.6800		DZ 29.663 30.014 30.212		DZ 44.608 44.758 44.921		02 50.329 50.199 50.308		REFERE	2690,0000 9 474,8100 1 936,5800		DZ 3.160 3.398 3.235
		SREF = BREF = SCALE =									SREF # LREF # BREF # SCALE #		

CAZ3B
TABULATED SOURCE DATA - CA23B
22 MAR 76

MAR 76	TABULATED	ATED SOURCE DATA	DATA - CA238	:38					PAGE	217
		ARC	14-120(CA23B)	1/44/	AT1 0251 (OR	(ORBITER DATA)		CONHOES	3) (08 0C)	1 75)
BEFERE	REFERENCE DATA						-	PARAMETR1C	DATA	
2690.0030 S 474.8100 1 936.6800 1	SO.FT. XMRP IN. YMRP IN. ZMRP	= 1109	.0000 IN. XO .0000 IN. YO .0000 IN. ZO				BETA # RUDDER # 10RB # DY	.000 .000 .000 .000	STAB = ELEVON = DX MACH =	5.000 .000 .000 .600
	P. NO.). 232/ 0	RN/L =	3.31 GRA	GRADIENT INTERVAL	ا ا	.007 5.00			
02 7.044 7.210 7.208	ALPHAC - 157 2.438 4.444 GRADIENT	BETAC 01844 02027 02151	BETAO 08117 08467 07606	PH1C -6.67827 .47652 .27892 1.57164	PH10 .77814 .58519 07705	CA . 03625 . 02543 . 01594 00440	CN . 22953 . 28950 . 35254 . 02656	CSL 00108 00101 00142 00007	CLN . 00087 . 00078 . 00061	
	RUN NO	3. 233/ 0	FN/L =	3.31 GR/	GRADIENT INTERVAL	ا ا	.00/ 5.00			
02 9.588 9.981 9.714	ALPHAC079 2.449 4.418 GRADIENT	BETAC 01877 02096 02148	BETAO 07495 07655 07156	PHIC -13.3650 .49045 .27883	PH10 .70875 .52627 .39877	CA .03631 .02573 .01567 00457	CN .23048 .29069 .35836	CSL -,00108 -,00121 -,00139	CLN .00084 .00082 .00064 00004	
	RUN NO	0. 234/ 0	RN/L =	3.31 GR	GRADIENT INTERVAL	ť.	.00/ 5.00			
02 14.480 14.703 14.839	ALPHAC 060 2.510 4.425 GRADIENT	BETAC 01899 01969 02234	BETAO 07835 07020 07276	PHIC -17.55720 .44958 .28959	PH10 74045 40946 40432	CA .03701 .02541 .01649 00457	CN . 22847 . 29925 . 36117 . 02947	CSL 00105 00134 00135	. 000059 . 000069 . 000066	
	RUN NO	0. 235/ 0	RN/L =	3.31 GR	GRADIENT INTERVAL	راً . ا	.00/ 5.00			
02 29.767 29.743 29.929	ALPHAC 083 2.454 4.441 GRADIENT	BETAC 02720 02849 03141	BETA0 07915 08272 07384	PH1C -18.05020 .66551 .40567	PH10 .74815 .56922 .40926	CA . 03832 . 02735 . 01631 00484	CN . 22828 . 30152 . 38699 . 03480	CSL 00125 00129 00153	CLN .00084 .00078 .00050	
	RUN	NO. 235/ 0	RN/L =	3.31 GF	GRADIENT INTERVAL	II.	-5.00/ 5.00			
02 44.538 44.541 44.965	AL PHAC 030 2.408 4.398 GRADIENT	BETAC 03016 03288 03562	EEIAO 07105 07398 07262	PHIC -45.63040 .78245 .46454 10.73182	FHIU .66987 .51262 .40355	.03930 .03930 .02806 .01666	CN . 22714 . 30739 . 39952 . 03871	CSL 00136 00121 00134	. 00073 . 00060 . 00086 . 000086	

DATE 22

PAGE 218	OCT 75)		6000. 6000. 6000.			OCT 75 1		000.1-	3					
Q.	60)	DATA	STA ELE DX MAC		CLN .00075 .00068 .00036	2	4140			CLN .00085 .00083 .00059		CLN .00090 .00092 .00071		CLN .00083 .00062 .00062
	(DNH023)	PARAMETRIC			CSL 00119 00127 00115	(PSOHNO)	PARAMETRIC	000.9		CSL 00110 00103 00133		CSL 00116 00105 00145		CSL 00106 00112 00150
	-		BETA ** RUDDER ** LORB ** D.	-5.00/ 5.00	CN . 22115 . 31469 .40081	-		BETA BUDDER BIORB BUDY	.00/ 5.00	Samo	00/ 5.00	CN . 22944 . 28666 . 35295 . 02699	0/ 5.00	. 23178 . 29008 . 35121 . 02700
	(ORBITER DATA)			Ħ	CA . 04046 . 02761 . 01711	(ORBITER DATA)			ស	CA . 03591 . 02447 . 01492	*	CA .03506 .02491 .01498 00440	WAL = -5.00	CA .03509 .02482 .01579
	AT1 0251			GRADIENT INTERVAL	PH10 .60450 .44958 .35867	AT1 0251 (0			GRADIENT INTERVAL	PH10 1.02723 75025 .59164 10226	GRADIENT INTERVAL	PH10 .91690 .72832 .61002	GRADIENT INTERVAL	PH10 .96998 .74093 .55238
CA23B	238) 747/1		7,0 7,0 7,0	3.31 6	PHIC -12.52690 .74761 .44853	238) 747/1		000	3.30 GR	PH1C 9.17543 .67006 .39684 -2.08954	3.30 GR	PHIC -10.32810 .59539 .39700 2.45152	3.30 GR	PHIC -23.52540 :36604 5.66359
DATA -	C 14-120(CA23B)		.0000 IN. .0000 IN.	RN/L =	BETAO 06300 05581 06447	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	BETAO 10599 10795 10588	RN/L ≈	BETAO 09671 10545 10967 00288	RN/L =	BETAO 10373 10781 09868
TABULATED SOURCE	AR		RP = 1109	10. 237/ 0	BETAC 03117 03313 03462 00075	ARC		P = 1109. P = 375.	0. 241/ 0	BETAC 01687 02780 03032	J. 242/ 0	BETAC 01946 02538 03068 00247). 243/0	BETAC 01552 02473 02779 00284
TAB		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC140 2.539 4.426 GRADIENT		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC .104 2.378 4.382 6RADIENT	RUN NO	ALPHAC 107 2.445 4.433 6RADIENT	NON NO	ALPHAC 036 2.466 4.354 GRADIENT
MAR 75		REFER	2690.0000 474.8100 935.6800 .0125		02 49.951 49.970 50.050		REFERE	2690.0000 474.8100 936.6800 1		02 2.790 3.147 3.235		02 7.214 7.169 7.223		9.900 9.900 9.833 9.797
UAIL GE MAR			SREF "LREF" BREF "SCALE "					SREF = LREF = BREF = SCALE =						

519	r 75)		. 0000								
PAGE	+) (21 OCT	DATA	STAB = ELEVON = DX = MACH =		CLN .00090 .00077 .00076 00003		CLN .00085 .00069 .00063		CLN .00073 .00065 .00054 00004		CLN .00071 .00067 .00043
	(DNHO24)	PARAMETR1C	. 000 . 000 . 000 . 000		CSL 00126 00130 00165		CSL 00146 00150 00168		CSL 00140 00162 00144 00001		CSL 00159 00155 00140
			BETA BRUDGER BE 1088 BE DY	10/ 5.00	CN . 22426 . 35455 . 35455	00/ 5.00	CN . 22842 . 30405 . 38590	.00/ 5.00	CN .22249 .30996 .39947 .03853	00/ 5.00	CN . 22563 . 31734 . 39729
	BITER DATA)			WAL = -5.00/	CA .03670 .02526 .01633	TVAL = -5.00/	CA .03775 .02652 .01591		CA .03959 .02759 .01622	RVAL = -5.00/	CA . 03958 . 02694 . 01684
	ATI 02SI (ORBITER			GRADIENT INTERVAL	PH10 1.03936 73058 .64617	GRADIENT INTERVAL	PH10 .98226 .73161 .57164	GRADIENT INTERVAL	PH10 .95638 .67049 .48992	GRADIENT INTERVAL	PH10 .98795 .70703 .52290
38	747/1			3.30 GRA	PHIC -5.82977 .51199 .37901	3.29 GR/	PH1C -22,87620 .65724 .42793 5,28621	3.28 GR	PHIC -9.19757 .77909 .46835	3.28 GR	PH1C -13.06200 .74722 .44997 3.15515
DATA - CA23B	ARC 14-120(CA238)		00000 IN. XO 00000 IN. YO 00000 IN. ZO	RN/L =	BETAO 10882 10553 11433	FN/L #	BETAO 10391 10629 10341	RN/L =	BETAO 09970 09689 08862	RN/L =	BETAO 10355 10365 09375 .00203
ATED SOURCE DATA	ARC		1109 = 375). 244/ 0	BETAC 01662 02833 02833). 245/0	BETAC 02060 02789 03348	0. 246/ 0	BETAC -,02125 -,03248 -,03629 -,00333	0. 247/ 0	BETAC 02348 53304 03447 00253
TABULATED		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 163 2.499 4.287 GRADIENT	RUN NO	ALPHAC 049 2.432 4.487 GRADIENT	RUN NO.	ALPHAC 131 2.390 4.445 GRADIENT	RUN NO	ALPHAC 101 2.534 4.394 GRADIENT
22 MAR 76		REFEREN	2690.0000 SQ. 474.8100 IN. 936.6800 IN.		02 14.827 14.725 14.404		02 29.598 29.897 29.731		DZ 44,528 44,796 44,981		02 49.996 50.084 50.059
DATE 22 M			SREF # CLREF # SCALE #								

SREF LREF BREF SCALE

4GE 220

PAGE 220	(21 OCT 75)
	(DNH025)
	ARC 14-120(CA23B) 747/1 ATI 02SI (ORBITER DATA)
	ARC 14-120(CA23B)

	-1.000 .000 .000										
DATA	STAB = ELEVON = DX =		CLN .00091 .00062 .00021		CLN .00081 .00053 00005		CLN .00085 .00061 00013		CLN .00078 .00051 00018		CLN .00077 .00048 00020
PARAME TR 1 C	000 		CSL 00112 00117 00133		CSL 00139 00127 00116		CSL 00158 00168 00119		CSL 00154 00134 00103		CSL 00145 00149 00088
	BETA = RUDDER = 10RB = DY	.007 5.00	CN .31896 .39210 .47129	.00/ 5.00	CN .32349 .39073 .48935 .03661	00/ 5.00	CN .32376 .40509 .48697 .03686	30/ 5.00	CN .31960 .41122 .51672 .04246	00/ 5.00	CN .31784 .41620 .53035 .04650
		ii In	CA .02346 .01295 .00418	ت - ح	CA .02310 .01358 .00397 00424	RVAL = -5.00/	CA .02372 .01251 .00501	7VAL = -5.00/	CA .02619 .01449 .00609 00438	# -5	CA .02748 .01524 .00674 00458
		GRADIENT INTERVAL	PH10 . 86433 . 59634 . 49282 08693	GRADIENT INTERVAL	PHIO .82723 .61215 .50087	GRADIENT INTERVAL	PHIO .78492 .58935 .46054	GRADIENT INTERVAL	PH10 .79624 .57813 .44632	GRADIENT INTERVAL	PH10 .73778 .58252 .46660 05977
		3.31 GR	PHIC 28.15880 54194 40075 -6.58775	3.31 GR	PHIC -34.19580 .51828 .42113 7.83983	3.30 GR	PHIC -54.03890 :53864 :32075 12.96060	3.31 GR	PHIC -6.88413 .61987 .39488 1.64858	3.32 GR	PHIC -9.85191 77675 -44576 2.33763
	3.0000 IN. XO .0000 IN. YO 5.0000 IN. ZO	RN/L *	BETAO - 12031 - 10603 - 10502	FN/L =	BETAO 11596 10961 10799	RN/L +	BETAO 11070 10727 09836	RN/L =	BETAO 11035 10450 09616	RN/L =	BETAO 10223 10427 10011
	1109	0 00 0	BETAC 02082 02238 03042 00218		BETAC 01829 02145 03288 0320	0 /0 .0	BETAC 01852 02390 02446 00140	0 /0	BETAC 01960 02650 03055 00239	0 / 0	BETAC 02289 03204 03429 00255
REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC .039 2.367 4.353 GRADIENT	RUN NO	ALPHAC 027 2 . 372 4 . 478 GRADIENT	RUN NO	ALPHAC 013 2.543 4.374 GRADIENT	RUN NO	ALPHAC 162 2.450 4.437 GRADIENT	RUN NO	ALPHAC 132 2.364 4.412 GRADIENT
REFER	2690.0000 474.8100 936.6800 0125		02 7.209 7.326		02 9.339 10.040 10.061		DZ 14.643 15.082 14.801		DZ 29.827 30.228 30.232		DZ 44.600 45.018 44.806

MAR 76		TABULATED	ATED SOURCE DATA ARC 14-12	DATA - CA23B	1/646	AT1 0251 (OR	(ORBITER DATA)		(DNH025)	PAGE 5) (21 OCT	E 221 1 75)
FERE	~	REFERENCE DATA						u.	PARAMETR 1 C	DATA	
2690.0000 474.8100 936.6800	SZZ	FT. XMRP I. YMRP I. ZMRP	* 1109 = 375	.0000 IN. YO .0000 IN. YO .0000 IN. YO				BETA # RUDDER # 10RB # DY #	.000 .000 .000 .000	STAB # ELEVON # DX # MACH #	-1.000
		RUN NO		RN/L *	3.32 GRA	GRADIENT INTERVAL	.5.	00/ 5.00			
02 9.823 0.763 0.761		ALPHAC 233 449 4.339 GRADIENT	BETAC 01744 02803 03644 00414	BETAO 09676 10520 11097	PH1C -4.27924 .65573 .48166 1.09482	PH10 .70952 .58103 .51783	CA .02856 .01477 .00691 00476	CN .31279 .42657 .53362 .04790	CSL 00116 00136 00109 .00001	CLN .00074 .000042 00004	
			ARC	ARC 14-120(CA23B)	1/247	AT1 0351 (OR	(ORBITER DATA)		CONHOR	(21	OCT 75)
اعا اعا اعا	يَ	REFERENCE DATA							PARAMETR 1C	DATA	
2690.0000 474.8100 936.6800	<u> </u>	50.FT. XMRP IN. YMRP IN. ZMRP	1109.0000 .0000 . = 375.0000	0000 IN. XO 0000 IN. YO 0000 IN. ZO				BETA = RUDDER = 10RB = DY	. 000 . 000 . 000 . 000	STAB = ELEVON = DX = MACH =	5.000 .000 .000 .600
		NON NO). 261/0	RN/L =	3.26 GR/	GRADIENT INTERVAL	VAL = -5.00	0/ 5.00			
02 7.310 7.309 7.865		ALPHAC . 046 2.283 4.288 GRADIENT	BETAC 01681 02325 02083	BETAO 11653 12102 10914	PHIC 20.05070 .58353 .273831	PH10 .83516 .58499 .51237	CA .00723 00383 01385 00497	CN .32271 .39580 .48404 .03793	CSL 00223 00235 00239	CLN .00021 .00028 00064	
		RUN NO). 262/ 0	RN/L =	3.28 SR	SRADIENT INTER	ERVAL = -5.0	.00/ 5.00			
02 9.835 9.901 9.652	10 01	ALPHAC 171 2.437 4.384 GRADIENT	BETAC 02014 01962 02335	BETAO 12235 11126 11355	PH1C -6.70156 .46137 .30547 1.60490	PHI0 .88163 .61936 .53245	CA .00732 00447 01363 00459	CN . 32552 . 40290 . 48477 . 03467	CSL 00229 00210 00252	CLN .00037 .00003 00044 00017	
		RUN NO	0. 263/ 0	RN/L =	3.27 GA	GRADIENT INTERVAL	J = -5	.007 5.00			
02 14.936 14.990 15.447	506	ALPHAC 143 2.462 4.479 GRADIENT	BETAC 02337 02474 02882 00115	BETAO 11434 11107 00027	PH1C -9.28071 .57592 .36907 2.16828	PHIO .81984 .61554 .53535	CA .00667 00511 01453	CN . 32434 . 40662 . 50475 . 03868	CSL 00260 00257 00242	CLN 00008 00035 00088 00017	

TABULATED SOURCE DATA - CA238

0CT 75)		5.000 .000 .000 .600							(52 120		5.000 .000 10.000 .600		
. 21	C DATA	STAB ELEVON # DX MACH E		CLN .00005 00031 00082		CLN 00013 00025 00084 00015		CLN .00008 00026 00088	(21	DATA	STAB ELEVON BOX		CLN .00045 .00000.
(DNH027)	PARAMETRI	000.8 000.8		CSL 00277 00250 00253		CSL 00267 00272 00239		CSL 00265 00263 00230	E DNHO28	PARAMETRIC	, 000 , 000 6, 000		CSL 00183 00223
(k		BETA # RUDDER # 10PB # DY	00/ 5.00	CN . 32450 . 41942 . 51981 . 04242	.00/ 5.00	CN .32765 .42886 .53251 .04510	00/ 5.00	CN .32082 .42376 .53965	-		BETA RUDDER E TORB E DY	.00/ 5.00	CN . 28077 . 33888 . 02875
CORBITER DATA			TRVAL = -5.	CA .00879 00398 01277	INTERVAL = -5.	CA .00935 00357 01237 00484	RVAL = -5.00	CA . 01043 00282 01232 00499	(ORBITER DATA			r C	CA .00923 00064
AT1 03S1 ((GRADIENT INTERVAL	PH10 .83374 .63153 .51881	GRADIENT INTE	PH10 .78267 .63500 .48893	GRADIENT INTERVAL	PH10 .83308 .64198 .53666	AT1 03S1 (0		·	GRADIENT INTERVAL	PH10 .77724 .70129 03757
238) 747/1		800	3.27 6	PH1C -9.99059 .66612 .39889	3.27 GF	PHIC -16.17440 .82395 .45049 3.89001	3.28 GF	PH1C -13.25630 .88102 .46373 3.12501	1/242 (88)			3.28 GR	PHIC .64808 .35516 13947
14-120(CA23B)		.00000 IN. XO .00000 IN. YO .00000 IN. ZO	RN/L *	BETAO 11546 11449 11120	EN/L *	BETAO 10878 11525 10459	RN/L =	BETAO 11579 11531 11520	14-120(CA23B		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	BETAO -,11208 -,12642 -,00709
ARC		1109). 264/ D	BETAC 02834 02940 03050 00047). 265/ 0	BETAC 03278 03643 03440 00043	. 266/ 0	BETAC 03225 03746 03580 00084	ARC		1109. 1 375.	. 281/ 0	BETAC 02782 02861 00039
	REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 161 2.529 4.385 GRADIENT	RUN NO	ALPHAC 113 2.534 4.379 GRADIENT	RUN NO	ALPHAC 137 2.437 4.427 GRADIENT		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 2.450 4.481 GRADIENT
	REFER	2690.0000 474.8100 936.6800 .0125		02 29.711 29.841 30.092		D2 44.673 44.791 44.852		02 50.205 50.115 50.310		REFER	2690.0000 474.8100 935.6800		02 3.140 3.154
		SREF = LREF = BREF = SCALE =									SREF = LREF = BREF = SCALE =		

22 MAR 76	TABUL	TABULATED SOURCE	DATA -							AGE 223
		ARC	14-120(CA23B)	3B) 747/1 ATI	0321	(ORBITER DATA)		CONHOCA	รี - อ๊	
REFERI	REFERENCE DATA							PARAMETR1C	DATA	
= 2690.0000 (= 474.8130 = 935.6800	SQ.FT. XMRP IN. YMRP IN. ZMRP	1109,0000 2 00000 375,0000	000 IN. XO				BETA = RUDDER = 10RB = DY	. 000 6. 000 . 000	STAB = ELEVON = DX = MACH =	
	RUN NO	0. 282/ 0	RN/L =	3.28 GRA	GRADIENT INTERVAL	r.	.00/ 5.00			
02 7.424 7.204	ALPHAC 2.022 4.410 GRADIENT	BETAC 02526 02631 00044	BETAO 11428 11343 .00035	PHIC .71587 .34213 15652	PH10 .80635 .63461 07193	CA .00883 00142 00429	CN . 29052 . 34814 . 02413	CSL 00208 00246	CLN .00044 .00039	
	NOR NOR	0. 283/ 0	RN/L ≈	3.28 GR/	GRADIENT INTERVAL	E.	.00/ 5.00			
02 9.851 9.970	ALPHAC 2.058 4.488 GRADIENT	BETAC 02201 02315 00047	BETAO 10749 11604 00353	PH1C .60993 .29588 12981	PH10 .75603 .64226 04702	CA .00853 00206 00438	CN . 29383 . 35572 . 02558	CSL 00217 00245 00012	CLN .00023 .00022	
	אַראַראַ	NO. 284/ 0	RN/L =	3.28 GR/	GRADIENT INTERVAL	11 C	.00/ 5.00			
02 14.671 755.41	AL PHAC 2.026 4.481 GRADIENT	BETAC 02188 01949	BETAO 11676 10932	PHIC .61866 .24945 15039	PH10 .82708 .60938 08868	CA .00892 00131 00416	CN .29526 .35548 .02453	CSL 00231 00259 00011	CLN .00023 .00024	
	RUN NO	10. 285/0	RN/L =	3.29 GR	GRADIENT INTERVAL	ء - ح	.00/ 5.00			
02 29.878 29.674	ALPHAC 2.180 4.515 6RADIENT	BETAC 03009 03186 00076	BETAO 11357 11495 00059	PHIC .79114 .40467 16549	PHI0 . 78798 . 63585	CA .00921 00185 00473	CN . 30855 . 38429 . 03243	CSL 00238 00276 00016	. 00000	
	RUN NO	40. 286/ 0	RN/L =	3.29 GR	GRADIENT INTERVAL	#	5.00/ 5.00			
DZ 44.780 45.100	ALPHAC 2.093 4.521 GRADIENT	BETAC 03422 03663 00099	BETAO 10437 11710 00524	PHIC .93579 .46462 19445	PH10 .73323 .64384 03681	CA .01075 00186 00519	CN .30711 .39971 .03813	CSL 00233 00229	CLN 00003 00006 000001	
	NO.	NO. 287/ 0	RN/L =	3.29 GR	GRADIENT INTERVAL	RVAL = -5.00	00/ 5.00			
DZ 50.200 50.258	ALPHAC 2.061 4.539 GRADIENT	BETAC 03561 03511	BETAG 11219 10759 .00185	PHIC .99020 .44362 22054	PH10 .79184 .59229	CA .01060 00240 00524	CN .31085 .40591 .03836	CSL 00239 00244 00002	CLN .00006 00013	

DATE 22

(57)		5.000												
9) (21 OCT	DATA	STAB # ELEVON # DX # MACH #		CLN .00019 00003		CLN .00012 00028 00016		CLN 00009 00058 00021		CLN 00021 00087 00028		CLN 00016 00085 00029		CLN 00007 00060 00021
(DNH029	PARAMETRIC	0000.8		CSL +.00235 00296 00031		CSL 00216 00277 00025		CSL 00233 00262		CSL 00250 00243		CSL 00265 00224 00018		CSL 00216 00229 00005
		BETA * RUDDER = IORB = DY	.00/ 5.00	CN . 39264 . 47220 . 04023	00/ 5.00	CN . 39438 . 48053 . 03546	.00/ 5.00	CN . 39790 .48215	00/ 5.00	CN .41509 .51674 .04268	0/ 5.00	CN .41269 .53100	0/ 5.00	CN .41260 .54130 .05107
(ORBITER DATA)			ı,	CA 00397 01417 00516	5.	CA ~.00355 ~.01440 ~.00446	.5	CA 00349 01364 00424	WAL = -5.00/	CA 00347 01309 00404	WAL = -5.00/	CA 00169 01227 00448	.VAL = -5.00	CA 00162 01289 00447
AT1 0351 (0)			GRADIENT INTERVAL	PH10 .63429 .52553 05500	GFADIENT INTERVAL	PHIO .60698 .53198	GRADIENT INTERVAL	PH10 .66418 .51875 06079	GRADIENT INTERVAL	PH10 .52962 .51576 04781	GFADIENT INTERVAL	PH10 .54550 .55913 03661	GRADIENT INTERVAL	PH10 .54654 .53117 04578
747/1			3.29 GR	PHIC ,58170 .37160 10624	3.28 GF	PHIC .66883 .31970 14370	3.28 GR	PHIC . 56255 . 27569 11990	3.29 GR/	PH1C . 75465 . 37609 15896	3.28 GF/	PHIC . 95549 . 49137 - 19673	3.28 GRA	PHIC .97390 .42574 21753
ARC 14-120(CA23B)		.0000 IN. XO	RN/L =	BETAO 11389 11296	RN/L =	BETAO 10716 11457 00305	RN/L =	BETAO 11692 11088 .00252	RN/L =	BETAO 11207 11126 .00034	RN/L =	BETAO 11354 12021 00283	RN/L =	BETAO 11315 11536 00088
ARC		1109	0. 291/ 0	BETAC 02502 02878 00190). 292/ 0	BETAC 02401 02501 00041	1. 293/ 0	BETAC 01983 02121 00058	. 294/ 0	BETAC 02803 02957 00065	. 295/ 0	BETAC 03479 03809 00140	. 2967 0	BETAC -,03444 -,03375 .00028
	REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 2.465 4.442 GRADIENT	NO NO	ALPHAC 2.057 4.486 GRADIENT	RUN NO	ALPHAC 2.020 4.412 GRADIENT	RUN NO	ALPHAC 2.128 4.510 GRADIENT	RUN NO.	ALPHAC 2.087 4.446 GRADIENT	RUN NO.	ALPHAC 2.027 4.547 GRADIENT
	REFERE	2690.0000 9 474.8100 1 936.6800 1		02 7.274 7.616		DZ 10.037 10.105		02 15.073 14.864		02 30.231 29.953		02 44.559 45.001		02 50.108 50.709
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TABULATED SOURCE DATA - CA238

5.000 .000 20.000 .600 225 ñ 90 CLN -.00006 -.00075 -.00029 CLN -.00024 -.00066 CLN .00021 -.00001 CLN .00002 -.00063 -.00025 .00033 -.000014 CLN .00041 .00011 <u>ت</u> STAB ELEVON DX u MACH PARAMETRIC DATA (DNH030) CSL -.00240 -.00237 .00001 CSL -.00243 -.00233 CSL -.00246 -.00245 .00001 CSL -.00223 -.00295 -.00032 CSL -.00221 -.00253 -.00017 CSL -.00229 -.00288 .000 .000 8.000 CN .41581 .51412 .04214 BETA = RUDDER = 10RB = DY = CN .41492 .53282 .05020 CN .39403 .47316 .03199 5.00 CN .39892 .47637 .03414 CN .40107 .51341 .04296 -5.00/ 5.00 CN .39110 .46246 .03796 GRADIENT INTERVAL = -5.00/ 5.00 -5.00/ 747/1 ATI 03SI (ORBITER DATA) CA -.00344 -.01353 -.00445 -.00186 -.01379 -.00456 -.00250 -.01205 -.00409 CA -.00201 -.01284 -.00461 CA -.00313 -.01404 -.00441 -.00321 -.01311 -.00526 GRADIENT INTERVAL = GRADIENT INTERVAL = PH10 .60343 .53565 .02886 PH10 .63959 .54039 PHIO .63408 .54147 -.03970 PH10 .62932 .51218 .05164 PH10 .63624 .52950 -.05678 PH10 .65572 .50770 -.05983 PHIC .94413 .49362 -.19182 PHIC .78313 .37597 -.15569 PHIC .93332 .45093 -.20679 PHIC .61408 .37869 -.12521 PHIC .60106 .31542 -.12592 PHIC . 70857 . 34524 -. 14686 3.28 3.29 3.30 3.28 3.28 ARC 14-120(CA23B) 268 BETAO -.11218 -.10951 BETAO -.11196 -.11582 -.00165 BETAO -.10641 -.11483 -.00358 BETAO -.'1172 -.11666 -.00189 BETAO -.11428 -.11298 BETAO -.11534 -.10935 RN/L = RN/L # 1109.0000 IN. 7 .0000 IN. 375.0000 IN. 2 RN/L * RN/L = RN/L = RUN NO. 306/ 0 BETAC -.03405 -.03800 -.00168 303/0 BETAC -.03388 -.03469 -.00035 302/ 0 BETAC -.02278 -.02442 -.00072 BETAC -.02643 -.02982 -.00130 BETAC -.02499 -.02706 -.00084 301/0 BETAC -.02651 -.02875 -.00119 305/ RUN NO. 304/ RUN NO. RUN NO. RUN NO. RUN NO. ALPHAC 2.080 4.413 ALPHAC 2.067 4.416 GRADIENT 1.934 4.549 GRADIENT ALPHAC 2.172 4.441 ALPHAC 2.474 4.355 GRADIENT ALPHAC 2.021 4.495 GRADIENT ALPHAC GRADIENT GRADIENT REFERENCE DATA 2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN. 02 50.425 50.408 DZ 14.887 14.608 02 30.123 29.781 DZ 7.146 7.541 02 10.020 10.077 DATE 22 MAR 76 SREF LREF BREF SCALE

(DNH031) (21 OCT 75)

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14-120(CA23B)
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DATA	STAB # ELEVON # DX # MACH #		CLN .00042 .00037		CLN .00036 .00035		CLN .00034 .00047		CLN .00015 00007		CLN .00006 .00000		CLN .00006 00012
PARAMETRIC	. 000 . 000 . 000 . 000		CSL 00188 00240 00027		CSL 00199 00242 00017		CSL 00192 00263 00028		CSL 00226 00230		CSL 00213 00257 00018		CSL 00220 00251 00013
:	BETA R RUDDER = 10RB = DY	.00/ 5.00	CN . 29153 . 34904 . 02973	.00/ 5.00	CN . 29390 . 35962 . 02567	-5.00/ 5.00	CN . 29682 . 36353 . 02605	.007 5.00	CN .30401 .37497 .03112	.00/ 5.00	CN .30543 .39231 .03621	.00/ 5.00	CN .30864 .39233 .03534
		5	CA .00959 00029	INTERVAL = -5.	CA .00976 ~.00135 ~.00434	11	CA .00991 00148 00444	# د ا	CA .01051 00040 00483	ال	CA .01108 00114 00509	ئ ا	.01101 00080 00499
		GRADIENT INTERVAL	PH10 .81921 .67753	GPADIENT INTE	PH10 .84432 .63820 08051	GRADIENT INTERVAL	PH10 .84748 .62948 	GRADIENT INTERVAL	PHI0 .83690 .63688	GPADIENT INTERVAL	PH10 .84522 .64588 08307	GRADIENT INTERVAL	PH10 .77825 .61233
	0.00	3.29 66	PHIC .58862 .32910 -:13415	3.29 65	PHIC .69479 .30304 15301	3.30 GF	PHIC .62868 .29705 12939	3.29 GA	PHIC .93809 .38367 24316	3.29 GF	PHIC .96397 .51921 18536	3.29 GA	PHIC 1.00299 .47336 22363
	3.0000 IN. XO .0000 IN. YO 5.0000 IN. ZO	RN/L =	BETAO 11848 12080 00120	RN/L =	BETAO 11866 11577 .00113	RN/L =	9ETAO ~.11919 ~.11366 .00216	RN/L ≢	BETAO 11754 11253 .00220	RN/L =	BETAO 11820 11536 .00118	RN/L #	BETAC 10948 10926
	1109	311/0	BETAC 02506 02510 00002		BETAC 02412 02404 .00003	G. 313/ 0	BETAC 02152 02343 00075	0. 314/ 0	BETAC 03245 02852	0. 315/ 0	BETAC -,03314 -,03956 -,00267	0. 316/ 0	BETAC 03506 03608 00043
REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 2.440 4.374 GRADIENT	Z ZOZ	ALPHAC 1.989 4.549 GRADIENT	RUN NG	ALPHAC 1.961 4.52' GRADIEN	RUN NO	ALPHAC 1.982 4.262 GRADIENT	RUN NO	ALPHAC 1.970 4.370 GRADIENT	PUN NO	ALPHAC 2.003 4.371 GRADIENT
REFERE	2690,0000 474,8100 936,6800		02 7.139 7.034		02 9.707 9.890		02 14.857 14.654		02 29.665 29.802		02 44.676 44.732		02 50.207 50.098
	SREF # LREF # BREF # SCALE #												

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PAGE	3) 747/1 ATI 0351 (ORBITER DATA) (DNH032) (21 OCT	DATA	STAB ELEVON B DX MACH		CLN 00121 00146 00013		CLN 00076 00102 00011		CLN 00061 00122 00025		CLN 00056 00110 00025		CLN 00020 00054 00014		CLN 00031 00052 00009							
		PARAMETRIC			CSL 00443 00729 00148		CSL 00404 00614 00088		CSL 00373 00591 00091		CSL 00373 00554 00082		CSL 00308 00423 00049		CSL 00268 00344 00032							
			BETA # RUDDER # 1088 # DY	00/ 8.00	CN . 28959 . 34637 . 02926	00/ 5.00	CN . 29558 . 35813 . 02627	0/ 5.00	CN . 29427 . 35553 . 02566	0/ 5.00	CN . 29966 . 36190 . 02829	.00/ 5.00	CN .30380 .37995	.00/ 5.00	CN .30480 .39172 .03673							
				, Š	CA .00636 00406 00537	= - 5.	CA . 00701 00472 00472	VAL = -5.0	CA .00787 00336 00471	WAL = -5.00.	CA .00777 00288 00484	e -5	CA .00973 00161 00488	: []	CA .01078 00119							
				GRADIENT INTERVAL	PH10 .59455 .38910 10588	GRADIENT INTERVAL	PH10 .63058 .45887 07212	GRADIENT INTERVAL	PH10 .58939 .43300 06552	GRADIENT INTERVAL	PH10 .62806 .42100 09413	GRADIENT INTERVAL	PHI0 .68540 .46823 09339	GRADIENT INTERVAL	PH10 .66315 .51062 06445							
38				3.30 GRA	PHIC .86275 .40825 23423	3.30 GRA	PHIC .90034 .20086 29381	3.30 GRA	PHIC . 74527 . 12651 25922	3.30 GRA	PHIC .41438 .00590 18569	3.30 GRA	PH1C .20473 08191 12326	3.30 GR/	PHIC .38496 .10517 11780							
DATA - CA23B	14-120(CA23B		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	BETAO 08529 06925	RN/L =	BETAO 08867 08215	RN/L =	BETAO 08306 07727 .00242	RN/L =	9£1AO 08945 07449	RN/L =	BETAO 09627 08313 .00565	RN/L =	8ETAO 09255 09105							
TED SOURCE	ARC						= 1109.	= 1109. = 375.	375.	= 1109. = 375. : 321/ 0	= 375. . 321/ 0	BETAC 03589 03078	0307 0307 .0026	BE f AC 03140 01534 .00675		BETAC 02575 00963	. 324/ 0	. 324/ BETAC 01481 00044	. 325/ 0	BETAC 00706 .00569	. 326/ 0	BETAC 01315 00801 .00217
TABULATED		CE DATA	SO.FT. XMRP	NON NO	AL PHAC 2.384 4.324 GRADIENT	PUN NO	ALPHAC 1.999 4.379 GRADIENT	NUN NO	ALPHAC 1.980 4.367 GRADIENT	NO. NO.	ALPHAC 2.049 4.248 GRADIENT	RUN NO	ALPHAC 1.976 4.301 GRAD1ENT	RUN NO	AL PHAC 1.958 4.325 GRADIENT							
1R 76		REFERENCE DAT	2690.0000 SC 474.8100 IN 936.6900 IN		3.217 3.310		מה 7.247 7.563		02 10.032 9.896		02 15.217 15.047		52 29.998 29.890		686 ' + + 8+9 ' + + 20							
DATE 22 MAR			SREF # G LREF # G BREF # SCALE #																			

(DNH032) (21 OCT 75)

ARC 14-120(CA23B) 747/1 ATI 03SI (ORBITER DATA)

	5.000 .000 .600			001 75 1		5.000 .000 .000 .600									
C DATA			CLN 00021 00046 00011	18	DATA	STA ELE DX MAC		CLN 00084 00075		CLN 00071 00087 00007		CLN 00059 00098 00016		CLN 00035 00140	
PARAMETRIC			CSL 00278 00320 00018	(DNH033)	PARAMETRIC	000 000 8,000		CSL 00542 00775 00126		CSL 00446 00686 00099		CSL 00429 00603 00073		CSL 00333 00378 00019	
	BETA RUDDER 10RB COY	.00/ 5.00	CN .30625 .39453 .03847			BETA = RUDDER = 10RB = DY	.00/ 5.00	CN .40031 .47746 .04181	.00/ 5.00	CN .39392 .47883 .03516	.00/ 5.00	CN . 39324 . 48724 . 03926	07 5.00	CN .40329 .51902 .04813	
		i,	CA .01114 00086	(ORBITER DATA)			ئ- ح	CA 00649 01622 00528	ح	CA 00459 01534 00445	ů.	CA 00402 01479 00450	3VAL * -5.01	CA 00294 01376 00450	
		GRADIENT INTERVAL	PH10 .67894 .52752	ATI 03S1 (0			GRADIENT INTERVAL	PH10 .41024 .32960 04370	GRADIENT INTERVAL	PHI0 .44991 .33288 04845	GFIADIENT INTERVAL	PH10 .48908 .34564 05992	SRADIENT INTERVAL	PH10 .47344 .35859 04777	
	000	3.30 GF	PHIC .52540 .16993 -,15489	38) 747/1		000	3.30 GR	PH1C .50255 .02781	3.32 GR	PHIC .53273 07601	3.31 GF	PHIC . 22675 24911 19876	3.31 98	PHIC 25403 33975 03565	
	0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L *	BETAO 09477 09327 .00065	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	BETAO 07366 07009	FN/L =	BETAO 07840 07059	RN/L =	BETAO 08521 07346	RN/L =	8ETAO 08245 07647	
	1109.). 327/ 0	BETAC 01805 01263 00236	ARC		1109.	. 331/ 0	BETAC 02145 00208	. 332/ 0	BETAC 01773 .00573	. 333/ 0	BETAC 00765 .01880	. 334/ 0	BETAC .00868 .02584 .00714	
REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	AL PHAC 1.969 4.264 GRADIENT		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 2.446 4.292 GRADIENT	RUN NO	ALPHAC 1.907 4.322 GRADIENT	RUN NO	ALPHAC 1.933 4.327 GRADIENT	RUN NO	AL PHAC 1.958 4.362 GRADIENT	
REFER	2690.0000 474.8100 936.6800		DZ 49.978 50.163		REFER	2690.0000 474.8100 936.6800		02 7.500 7.613		02 10.263 9.859		02 15.012 14.957		02 29.834 29.957	
	SREF "LREF" BREF "SCALE "					SREF # LREF # BREF # SCALE #									

ARC 14-120(CA23B) 747/1 ATI 03SI (ORBITER DATA)

(DNH034) (21 OCT 75)

	5.000 .000 .000										
DATA	STAB # ELEVON # DX # MACH #		CLN 00024 00019 00014		CLN 00017 00018 00021		CLN 00031 00024 00013		CLN 00027 00011 00050		CLN 00052 00032 00057
PARAMETR1C	.000 .000 .000		CSL 00231 00234 00277 00010		CSL 00247 00239 00292		CSL 00244 00252 00280		CSL 00277 00265 00297		CSL 00276 00271 00259
	BETA SUDDER SUDDER SUDORB	.00/ 5.00	CN . 22687 . 24693 . 34154 . 02536	00/ 5.00	CN -22769 -28761 -35076	00/ 5.00	CN . 22551 . 29080 . 35578 . 02873	.00/ 5.00	CN .22680 .30635 .37699	00/ 5.00	CN . 22556 . 31082 . 39261 . 03570
		r Č	CA .01782 .00717 00208	R/AL = -5.00/	CA .01750 .00754 00270	RVAL = -5.00/	. 01841 . 00771 00233	" rb	CA . 028001 00200 00483	RVAL = -5.00/	CA .02039 .00919 00204
		GRADIENT INTERVAL	PH10 1.04426 .72887 .58785 10268	GRADIENT INTERYAL	PH10 1.03142 .73083 .56184 10513	GRADIENT INTERVAL	PHI0 .99812 .71547 .56279	GRADIENT INTERVAL	PH10 1.05513 .72658 .52895 11658	GRADIENT INTERVAL	PH10 .95563 .69784 .59033
		3.30 GR	PHIC -7.34571 .89645 .47763	3.30 GR	PHIC -8.02130 .84303 .43814 1.96825	3.30 GR	PHIC -6.76144 .76959 .40248	3.29 GR	PHIC -7.87449 .89504 .44225 1.92536	3.30 GR	PHIC -9.54070 .92333 .50863
	. 00000 IN. YO	RN/L *	BETAO 10742 10413 10322	5N/L	BETAO 10667 10466 09942	RN/L =	BETAO 10281 09946 00071	RN/L =	BETAO 10822 10457 09353	RN/L =	BETAO 09929 10021 10475
	= 1109 = 375	0. 343/ 0	BETAC 03668 03617 03508	344/0	BETAC 03420 03433 03249	0. 345/ 0	BETAC -,03016 -,03132 -,02981	0 346/ 0	BETAC03699035860358603291	1. 347/ 0	BETAC03951037790380600034
REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 285 2.312 4.212 GRADIENT	RUN NO.	ALPHAC 243 2 .334 4 .253 GRADIENT	RUN NO.	ALPHAC 254 2.332 4.248 GRADIENT	RUN NO	ALPHAC 267 2.360 4.268 GRADIENT	RUN NO.	ALPHAC 235 2.345 4.291 GRADIENT
REFERE	2690.0000 Si 474.8100 11 936.6800 11		DZ 7.400 7.390 7.046		02 9.858 9.870 9.840		02 14.745 14.663 14.715		02 29.743 29.911 29.627		02 44.607 44.784 44.631
	SREF = BREF = SCALE =										

. 231	1 75 1		5.000					1 75)		5.000				
PAGE	(21 00	DATA	STAB = ELEVON = DX =		CLN 00040 00022 00037		CLN 00032 00034 00044	5) (21 OCT	DATA	STAB # ELEVON = DX # MACH #		CLN .00009 .00008 .00008		CLN .00013 .000021 .00005
	(DNH034)	PARAMETRIC	.000 .000 6 .000		CSL 00238 00265 00279		CSL 00230 00256 00225	(DNH035	PARAMETRIC	0000.		CSL 00205 00193 00197		CSL 00217 00200 00208
			BETA * RUDDER * 10R8 * DY	0/ 5.00	CN .22182 .31376 .39443 .03812	0/ 5.00	CN . 22058 . 31625 . 40185			BETA = RUDDER = 10RB = DY	.00/ 5.00	CN .11669 .17736 .23903 .02882	00/ 2.00	CN .12585 .18918 .24729
	CORBITER DATA			IVAL = -5.00/	CA .02123 .00898 00162	NAL = -5.00	CA . 02167 . 00947 00155	(ORBITER DATA)			* r	CA .02791 .01995 .01092	RVAL = -5.00/	CA . 02803 . 01905 . 01080 00381
	AT1 0351 (OR			GRADIENT INTERVAL	PH10 1.04302 71885 56278 10759	GRADIENT INTERVAL	PH10 .90528 .74681 .53658 08005	AT1 0351 (0F			GRADIENT INTERVAL	PH10 1.69880 1.16320 79606 21364	GRADIENT INTERVAL	PH10 1.68804 1.08391 .81823 19589
CA23B	747/1			3.30 OR.	PHIC -8.32467 .90826 .50525 2.05183	3.31 GR	PHIC -7.14063 .93720 .46705 1.74123	747/1		000	3.30 GF	PHIC 76.95740 .70017 .37812 -18.45311	3.29 65	PH1C -8.22679 .70182 .36910
DATA -	14-120(CA23B)		.0000 IN. YO .0000 IN. YO	RN/L =	ETAO - 10695 - 10326 - 09959	EN/L =	BETAO 09233 10531 09504	14-120 (CA23B)		.0000 IN. XO .0000 IN. YO .0000 IN. ZO	RN/L =	9ETAO 11846 12457 11301	RN/L =	BETAO 11798 11699 11699
TED SOURCE	ARC		1109.0 20.0 375.0	348/ 0	BETAC 03498 03742 03761		BETAC 03495 03743 03481	ARC 1		1109 = 375 = 375	. 351/ 0	BETAC 03028 02773 02798	. 352/ 0	BETAC 03062 02923 02756
TABULATED		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 239 2.351 4.269 GRADIENT	RUN NO.	ALPHAC 279 2.289 4.275 GRADIENT		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	PUN NO	ALPHAC .007 .270 .244 GRADIENT	RUN NO.	ALPHAC - 212 2.387 4.282 GRADIENT
MAR 76		REFERE	2690.0000 8 474.8100 1 936.6800 1		02 49.960 50.084 50.051		02 61.655 61.629 61.640		REFER	2690.0000 474.8100 936.6800		02 3.392 3.273 3.233		02 7.633 7.582 7.362
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14-120 (CA23B)
ARC

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(21 OCT	DATA	STAB # ELEVON # DX MACH #		CLN .00018 .00033 .00023		CLN .000014 .000022		CLN 00000 000012 00005		CLN 00022 00018 00022	
(DNH035)	PARAMETR 1C	0000		CSL 00211 00213 00221		CSL 00239 00232 00213		CSL 00236 00239 00229		CSL 00228 00233 00251	
		BETA = RUDDER = 10RB = 3Y	5.00	CN . 12631 . 19503 . 25470 . 02864	00/ 5.00	CN . 12974 . 19909 . 26210 . 02883	0/ 5.00	CN .12774 .21261 .28212	0/ 5.00	CN . 12916 . 21693 . 29423 . 03629	
RBITER DATA			7VAL = ~5.00/	.02812 .02812 .01906 .01041	"/AL = -5.00/	CA .02863 .01974 .01058 00392	WAL = -5.00/	CA .03010 .02080 .01135 00408	VAL = -5.00/	CA .03086 .02199 .01184 00416	
747/1 ATI O3SI (ORBITER DATA)			GRADIENT INTERVAL	PH10 1,80764 1,10894 85163	GRADIENT INTERVAL =	PH10 1.70827 1.09587 .78558	GRADIENT INTERVAL	PH10 1.75519 1.07113 -80534	GRADIENT INTERVAL	PH10 1.75263 1.02451 74408 22576	
			3.29 GR	PHIC -7.85370 .72877 .36932 1.91436	3.29 GR/	PHIC -6.07208 .68053 .33796 I.46207	3.29 GRA	PHIC -7.33018 .90855 .46363 1.78730	3.30 GRA	PH1C -7.92866 .90396 .49913 1.94455	
ARC 14-120(CA23B)		. 0000 IN. YO . 0000 IN. YO 375.0000 IN. 20	RN/L =	BETAO 12461 12008 12130	FN/L ≈	BETAO 11769 11866 11239	RN/L #	BETAO 11983 11586 11535	RN/L =	BETAO 11801 11132 10619	
ARC			0. 353/ 0	BETAC 02937 02941 02743	354/0	BETAC 02868 02760 02537	1. 355/ 0	BETAC 03499 03719 03471	. 356/ 0	BETAC 03778 03663 03708	
	REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 213 2.313 4.259 GRADIENT	RUN NO.	ALPHAC 270 2.324 4.304 GRADIENT	RUN NO.	ALPHAC 272 2.346 4.294 GRADIENT	RUN NO.	ALPHAC 271 2.322 4.260 GRADIENT	
	REFERE	2690.0000 S 474.8100 1 936.6800 1		02 9.664 9.916 9.803		DZ 15.113 14.808 14.693		02 29.891 29.979 29.891		07 644,444 647,749 74,7865	

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TABULATED SOURCE DATA - CA23B	
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PAGE 233	1 OCT 75)		0000.		M		M = -		መ <u>ታ</u>		27 36 14		13 00 06		03 08 08
	E) (5	DATA	STAB ELEVON DX MACH		CLN 00033 00011		CLN 00023 .00004		CLN .00015 .00006		CLN .00027 00006 00014		CLN .00013 00006		CLN 00003 00008 00002
	(DNH038	PARAMETR1C	000.01		CSL 00230 00275 00024		CSL 00227 00267 00017		CSL 00248 00297 00021		CSL 00240 00285 00019		CSL 00239 00293 00023		CSL 00268 00306 00017
			BETA RUDDER TORB DY	00/ 5.00	CN .28028 .33987 .03150	.00. 5.00	CN .28306 .34559 .02614	.00/ 5.00	CN . 29499 . 35412 . 02502	.00/ 5.00	CN .29541 .36310 .02810	.00/ 5.00	CN .29921 .37029 .02990	00/ 2.00	.31541 .39221 .03411
	BITER DATA)			" -5.	CA .00882 00094 00516	1. 5	CA .00901 00177 00451	ξ5	CA .00806 00205 00428	ار ا	CA .00840 00272 00462	INTERVAL = -5.	CA .00883 00257 00479	INTERVAL = -5.	CA .00878 00197 00478
	ATI 03SI (ORBITER			GRADIENT INTERVAL	PH10 .91938 .73367 09815	GRADIENT INTERVAL	PH10 .90360 .72225 07580	GRADIENT INTERVAL	PHIO .96700 .73206 09942	GRADIENT INTERVAL	PH10 .95756 .70225 10601	GRADIENT INTE	PHIO .94518 .68539	GRADIENT INTE	PHIO. .89724. .67676.
38	ARC 14-120(CA23B) 747/1 AT			3.32 GR	PHIC 4.52066 2.57555 -1.02807	3.31 GR	PHIC 5.13611 2.45340 -1.12130	3.30 GR	PHIC 5.37556 2.50473 -1,21489	3.30 GR	PHIC 5.32907 2.47594 -1.18471	3.29 GF	PH1C 5.25682 2.48618 -1.16554	3.29 64	PH1C 5.50419 2.69968 -1.24576
DATA - CAE3B			9.0000 IN. XO .0000 IN. YO 5.0000 IN. ZO	RN/L =	AC BETAO 193 - 13030 U 1947 - 12992 E 346 - 00020 - 1	RN/L = 3	BETAO 12648 12935 00120	RN/L =	8ETA0 13656 13052 .00255	RN/L =	BETA0 -,13563 -,12677 .00368	RN/L = 3	BETAO 13410 12353 .00445	RN/L =	BETA0 *.12852 12151 .00312
ATED SOURCE			1109.	. 361/ 0 RN		, 362/0	BETAC 18082 18954 00322). 363/ 0	BETAC 18941 19125 00078	364/0	BETAC 19109 19254 00060	0, 365/0	BETAC -, 19291 -, 19407 -, 00049	0.366/0	BETAC 20804 20777 .00012
TABULATED		REFERENCE DATA	.FT. XMRP = 1 YMRP = 2NRP =	NUR NO	ALPHAC 2.302 4.194 GRADIENT	RUN NO	ALPHAC 2.012 4.405 GRADIENT	RUN NO.	ALPHAC 2.013 4.376 GRADIENT	RUN NO	ALPHAC 2.049 4.457 GRADIENT	RUN NO	ALPHAC 2.097 4.474 GRADIENT	RUN NO	ALPHAC 2.159 4.411 GRADIENT
MAR 75		REFEREN	2690.0000 SQ 474.8100 IN. 936.6800 IN.		DZ 1.654 2.469		02 2.877 3.365		DZ 7.393 7.226		02 9.858 10.104		02 14.553 14.643		0 2 29.819 29.992

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(DNH036)

ARC 14-120(CA23B) 747/1 ATI 03SI (ORBITER DATA)

	5.0000 0000 0000.							0CT 75)		000.1-		
: DATA	STAB "ELEVON "DX MACH "		CLN 00007 00014 00003		CLN .00005 +.00040		CLN .00010 00014	(21	DATA	STAB ELEVON EDX		CLN 00002 00016 00012
PARAMETRIC	. 000 . 6. 000		CSL 00254 00279 00011		CSL 00239 00281		CSL -,00254 -,00268 -,00006	(DNH037)	PARAMETRIC	.000 .000 6.000		CSL 00187 00218 00235
	BETA RUDDER SIONE BILL	00/ 5.00	CN . 31399 . 40248 . 03815	00/ 5.00	CN . 30944 . 41281 . 04264	00/ 5.00	CN .32531 .41171 .03795	-		BETA # RUDOER # IORB # DY #	00/ 5.00	CN . 23025 . 28159 . 33857 . 02839
		RVAL = -5.00/	CA .01093 00126 00526	RVAL = -5.00	CA .01182 00173 00559	RVAL = -5.00/	CA .01022 .00091 00489	RBITER DATA			RVAL = -5.00/	.01641 .00769 00214 00486
		GRADIENT INTERVAL	PH10 .90037 .70425 08456	GRADIENT INTERVAL	PH10 .91029 .69045	GRADIENT INTERVAL	PHIO .87077 .68473	747/1 ATI 03SI (ORBITER DATA)			GRADIENT INTERVAL	PHIO 1.12166 .82874 .67006
		3.29 GR	PHIC 5.88810 2.83211 -1.31772	3.30 GR	PHIC 5.99192 2.75051 -1.33703	3.30 GR	PH1C 5.62690 2.73775 -1.26898				3.33 GR	PHIC 2.49361 .63611 .39023
	109.0000 IN. XO .0000 IN. YO 375.0000 IN. ZO	RN/L =	BETAO 12790 12616	RN/L =	BETAO 12804 12437 .00151	RN/L =	BETAO *.12489 12303 .00082	14-120(CA23B)		109.0000 IN. XO .0000 IN. YO 375.0000 IN. 20	RN/L =	BETAO -,12383 -,11879 -,11948
		0. 367/ 0	BETAC 21159 21604 00192	0 368/ 0	BETAC 21146 21307 00066	0. 369/ 0	BETAC 21075 21097 00010	ARC			0. 371/ 0	BETAC 02268 02549 02949
REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 2.052 4.371 GRADIENT	RUN NO	ALPHAC 2.015 4.439 GRADIENT	RUN NO	ALPHAC 2.140 4.416 GRADIENT		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	AL PHAC . 521 2.297 4.335 GRADIENT
REFERE	2690.0000 8 474.8:00 1 936.6800 1		DZ 45.057 44.937		DZ 50.129 50.420		02 62,057 61.853		REFERE	2690.0000 S 474.8100 1 936.6800 1		02 1.955 1.879 1.932
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r 235	(T 75)		-1.000 .000 .000 .600										
PAGE	1) (21 OCT	DATA	STAB = ELEVON = DX = MACH =		CLN .00037 .00003 .00019		CLN .00012 .00028 00003		CLN . B0003 . 000003 . 000003		.00013 .00013 00026		CLN .00003 .00009 00018
	(DNH037)	PARAMETRIC			CSL 00205 00217 00240		CSL 00226 00244 00295 00015		CSL 00223 00233 00294		CSL 00232 00247 00283		CSL 00248 00249 00265 00004
			BETA FRUDDER FIORB COY	10/ 5.00	CN - 23251 - 28209 - 34090 - 02419	00/ 2.00	CN .22811 .29331 .35332	.00/ 5.00	CN . 23395 . 28841 . 36099	.00/ 5.00	CN 52914 90193 96453 58453	.00/ 5.00	CN 23664 39284 03426
	(ORBITER DATA)			VAL = -5.00/	CA .01712 .00741 00248 00439	" .5.	CA .01778 .00637 00320 00459	# - 5	CA .01726 .00737 00375 00458	ا ال	CA .01707 .00808 00322 00457	r.	CA .01904 .00903 00319
	A11 0351 (0R			GRADIENT INTERVAL	PH10 1.27886 .89499 .73005	GRADIENT INTERVAL	PH10 1.21514 .89448 .65536	GRADIENT INTERVAL	9H10 1.18499 97619 97619	GRADIENT INTERVAL	PHI0 1.19552 .85170 .65750	GRADIENT INTERVAL	PHIO 1.19126 .87782 .65310
38	747/1			3.32 GRA	PHIC -18.87120 .53920 .4.49081	3.32 GR/	PHIC -5.57095 .55136 .33426 1.36990	3.31 GR	PHIC -10.99320 .42264 .32219 .54688	3.31 GR	PHIC 23.75730 .46896 .27023 -5.40509	3.32 CA	PHIC -29.04110 .57263 .36271 6.58687
DATA - CA23B	14-120(CA23B)		.0000 IN. XO .0000 IN. YO	RN/L #	BETA0 13684 12938 13064) L 4	BETAO 12654 13121 11746	RN/L = 3.	BETA0 12574 12665 12354	RN/L =	BETAO 12958 12262 11862	RN/L =	BETAO 12596 12652 12061
ATED SOURCE	ARC		= 1109. = 375.	RUN NO. 372/ 0	BETAC 02496 02272 03116 00129	BETAC 01792 02420 02543	10. 374/ 0	BETAC 01856 01770 02513	0. 375/ 0	BETAC 01580 01943 02101	NO. 376/ 0	BETAC 02028 02769 02850	
TABULATED		REFERENCE DATA	SO.FI. XMRP IN. YMRP IN. ZMRP			RCN N	ALPHAC 184 2.515 4.363 GRADIENT	RUN NO	AL PHAC 096 2 . 401 4 . 474 GRADIENT	RUN NO	AL PHAC . 036 2.374 4.458 GRADIENT	RUN	AL PHAC 037 2 . 359 4 . 506 GRADIENT
MAR 76		REFEREN	2690.0000 SQ. 474.8100 IN. 936.6800 IN.				DZ 7.238 7.611 7.497		02 10.003 9.942 10.030		02 14.990 14.729 14.795	02 29. 795 29. 929 30. 138	
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TABULATED SOURCE DATA - CA23B

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. 21	C DATA	STAB E ELEVON M DX MACH		CLN 00014 .00000 00031 00003		CLN 00011 00008 00056 00010		CLN 00033 00016 00042	. 21	DATA	STAB = ELEVON = DX =		CLN . 00092 . 00083 . 00094
(DNH037)	PARAMETRIC	000. 000. 000. 000.		CSL 00258 00264 00266		CSL 00247 00239 00250 00001		CSL 00246 00252 00250 00001	(DNH038)	PARAMETR1C			CSL 00078 00087 00136
(A		BETA RUDDER 1008	.00/ 5.00	CN - 22591 - 31944 - 39572 - 03898	.007 5.00	CN .24173 .31386 .41024 .03751	.00/ 5.00	CN . 23641 . 31800 . 40891	5		BETA # RUDDER # 10RB # DY #	.007 5.00	CN .31545 .37602 .44420 .02963
(ORBITER DATA)			# C	CA .02092 .00852 00160	β.	CA .01961 .00988 00267 00496	H T	CA . 02077 . 00997 . 00164	(ORBITER DATA)			# ·	CA .01987 .00905 00213
AT1 0351 ((GRADIENT INTERVAL	PH10 1.13302 .83991 .69755	GRADIENT INTERVAL	PH10 1.08333 .88282 .65317	GRADIENT INTERVAL	PH10 1.15102 .83841 .65927	AT1 0351 (0			GRADIENT INTERVAL	PH10 1.16331 .86754 .66987
238) 747/1		0.00	3.32 06	PHIC -14.48000 .68807 .44955 3.60822	3.31 GR	PH1C 30.86850 76690 .44383	3.31 GR	PHIC -62.78220 .71238 .41654 14.65652	747/1			3.34 GR	PHIC 37, 71810 .97421 .58044 -8.65058
14- c (CA23B)		0000 IN. YO 0000 IN. YO 0000 IN. ZO	RN/L =	BETAO - 12014 - 12302 - 12386 - 00087	EN/L =	BETAO 11717 12711 11877 00038	RN/L =	BETA0 12245 12133 11829	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	BETAO - 12129 - 12271 - 12060
ARC		= 1109.	0. 377/ 0	BETAC -, 02459 -, 02998 -, 03340 -, 00200	0. 378/ 0	BETAC 02125 03099 03501 00307	0. 379/ 0	BETAC 02570 02957 03202 00143	ARC		# 1109. # 375.	381/0	BETAC -, 03585 -, 03898 -, 04440 -, 00196
	REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC + 096 2 497 4 260 6RADIENT	RUN NO	ALPHAC .036 2.316 4.524 GRADIENT	RUN NO	ALPHAC 013 2.379 4.408 GRADIENT		REFERENCE DATA	SQ.FT. XHRP IN. YHRP IN. ZHRP	RUN NO	ALPHAC . 046 2 . 293 4 . 387 GRAD IENT
	REFERE	2690.0000 5 474.8100 1 935.6800 1		DZ 45.027 44.952 44.914		02 50.481 50.592 50.369		DZ 61.632 61.965 61.651		REFERE	2690.0000 SC 474.8100 H 11.0083.836 11.0083.059		02 +.603 569 2.306
		SREF LREF BREF SCALE									SREF LREF # BREF # SCALE #		

TABULATED SOURCE DATA - CA23B

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			ARC	14-120(CA23B)	1747/1	AT1 0351 (OF	(ORBITER DATA)		(DNH038	(21 00.	1 75)
ō.	REFERENCE	INCE DATA							PARAMETR1C	DATA	
2690.0000 474.8100 936.6800	1000 S 1100 I 1300 I	SO.FT. XMRP IN. YMRP IN. ZMRP	= 1109. = 375.	0000 IN. XO 0000 IN. YO 0000 IN. ZO				BETA # RUDDER # 10RB # 0Y		STAB # ELEVON # DX # MACH #	5.000 5.000 .600
		RUN NO.	. 382/ 0	RN/L =	3.33 GR	GRADIENT INTERVAL	4VAL = -5.01	00/ 5.00			
20 m m m	02 3.468 3.699 3.469	ALPHAC .019 2.422 4.425 GRADIENT	BETAC 04292 04300 04540	BETAO 12442 12381 12016	PHIC 65.58800 1.01754 58844 -15.15230	PHIO 1,15052 .85131 .66722 -,11019	CA .01564 .00589 00258	CN 33169 38430 44793 02624	CSL 00082 00036 00132	CLN .00109 .00116 .00123	
		RUN NO.	. 383/ 0	EN/L =	3.33 GR	GRADIENT INTERVAL	il C	.00/ 5.00			
707.	02 7.736 6.902 7.339	ALPHAC 027 2.422 4.419 GRADIENT	BETAC 03671 04018 04382	BETAO 11960 12460 12334	PHIC -53.27060 .95082 .56875 IZ.48313	PH10 1,10916 ,86612 ,68592	CA .01714 .00726 00340	CN .33495 .38780 .46216	CSL 00100 00118 00162	CLN .00119 .00141 .00138	
		RUN NO	. 384/ 0	FN/L =	3.32 GR	GRADIENT INTERVAL	٠. د	.00/ 5.00			
20 .0.6.0.0	02 10.309 9.703 10.031	AL PHAC .047 2.409 4.489 GRADIENT	BETAC 03599 03787 04151	BETAO 12375 12099 11816	PHIC 38,45710 .90067 .53038 -8,70301	PHIO 1.13445 .83805 .65168	CA .01738 .00758 00349	CN .33740 .39319 .46655 .02895	CSL 00109 00126 00150	. 00134 . 00146 . 000142	
		NON NO	. 385/ 0	RN/L *	3.32 GR	GRADIENT INTERVAL	ι. Έ	.00/ 5.00			
26.5	02 5.037 4.855 4.876	AL PHAC 141 2.495 4.418 GRADIENT	BETAC 03593 03772 03729	BETAO 11641 12284 12257	PHIC -14.34110 .86659 .48407 3.40255	PH10 1,10172 ,84153 ,68098	CA .01938 .00737 00278	CN .32545 .40069 .47285 .03211	CSL 00119 00136 00148	.00135 .00152 .00157 .00005	
		PUN NO	. 385/ 0	RN/L ≖	3.32 GR	GRADIENT INTERVA	1 5	.00/ 5.00			
02 30. 30.	02 30.004 29.816 30.280	AL PHAC 165 2 . 497 4 . 402 GRADIENT	BETAC 03289 03586 03419	BETAO 12310 11997 11822 .00108	PHIC -11.30050 .82315 .44541 2.69869	PH10 1.17505 .82081 .65455	CA . 02016 . 00824 00163	CN . 33197 . 41344 . 49030 . 03441	CSL 00131 00134 00149	. 00129 . 00134 . 00152	

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. 21	C DATA	STAB # ELEVON # DX #		CLN .00126 .00145 .00121		CLN .00100 .00131 .00138		CLN .00122 .00137 .00006	08	DATA	STAB = ELEVON = DX =		CLN .00125 .00094 00017
(BE0HNQ)	PARAMETR10			CSL 00125 00138 00150		CSL 00147 00146 00147		CSL 00143 00143	(DNH039)	PARAMETRIC	.000 10.000 6.000		CSL 00057 00096 00021.
5		BETA RUDDER RIORB ROY	-5.00/ 5.00	CN .33601 .41630 .50528 .03847	.00/ 5.00	CN 33056 42260 50396 03985	.00/ 5.00	CN .31855 .41635 .03699	-		BETA ** RUDDER ** 10RB **	00/ 5.00	CN .37026 .43525 .03467
(ORBITER DATA)			,	CA .02056 .00949 00176	1. 10.	CA .02136 .00899 00071	# C	CA .02313 .01025 00487	(ORBITER DATA)			# 5.	CA .02786 .01854 00497
ATI 0351 (0			GRADIENT INTERVAL	PH10 1.11116 .83934 .62394 11134	GRADIENT INTEFVAL	PH10 1.15620 .82743 .68898 10959	GRADIENT INTERVAL	PHIO 1.19977 .83717 13714	ATI 0251 (0			GRADIENT INTERVAL	PH10 .87245 .63710 12554
38) 747/1			3.31 GF	PHIC 25.58280 .81918 .48369 -5.90136	3.30 GA	PH1C -44.04270 .82787 .47228 10.81298	3.30 GR	PH1C -16.33250 .78499 6.47423	747/1			3.35 GR	PHIC 4.49942 2.53815 -1.04614
14-120(CA23B)		0000 IN. YO 0000 IN. YO 0000 IN. ZO	RN/L =	BETAO - 12025 - 12293 - 11277	FN/L ≈	BETAO 12247 12127 12302	RN/L =	BETAO 12518 12084 .00164	14-120(CA23B)		0000 IN. YO 0000 IN. YO 0000 IN. ZO	RN/L =	BETA0 12482 11294 .00634
ARC		= 1109. = 375.). 387/ 0	BETAC 03347 03546 03751	0 /882 0	BETAC03541036300352800000	. 389/ 0	BETAC 03365 03464 00038	ARC		# 1109. # 375.	. 391/ 0	BETAC 18785 18878 03050
	REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC .070 2.481 4.448 GRADIENT	RUN NO	ALPHAC 037 2 .513 4 .284 GRAD ENT	RUN NO	ALPHAC 115 2.529 GRADIENT		NCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 2.388 4.263 GRADIENT
	REFERE	2690.0000 474.8100 936.6800 9125		D2 44.879 44.946 44.926		02 49.971 50.192 50.509		02 61.515 60.520		REFERENCE	2690.0000 S 474.8100 1 935.6800 1		02 3.148 3.390
		SREF = LREF = BREF = SCALE =									SREF = BREF = SCALE =		

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76	TABULATED	ATED SOURCE	DATA - CA23B	, 88					<u>а</u> (r
		ARC	14-120 (CA23B)	B) 747/1 A	11 0251	(ORBITER DATA)		6£0HNQ)	_	ر د
RFEREN	REFERENCE DATA						α.	ARAM	}	
2690.0000 SQ.1 474.8100 IN. 936.6800 IN.	S.FT. XMRP	1109	0000 IN. XO				BETA BRUDDER B	000.01	STAB == ELEVON == DX == MACH ==	
	RUN NO	. 392/ 0	RN/t	3.34 GR/	GRADIENT INTERVAL	i Ĉ	00/ 2.00			
02 7.312 7.376	ALPHAC 2.139 4.461 GRADIENT	BETAC 19944 20873 00400	BETAO 13097 12354 .00320	PHIC 5.32723 2.68162 -1.13959	PH10 .91607 .68550 09928	CA .02778 .01714 00458	CN .38048 .45416 .03174	CSL 00077 00146 00030	CLN .00136 .00112	
	RUN NO	0 /283/ 0	RN/L =	3.34 GR	GRADIENT INTERVAL	L = -5.	00/ 5.00			
DZ 9.885 10.083	ALPHAC 2.001 4.424 GRADIENT	" (11)	BETAO 12519 12231	PHIC 5.81649 2.72628 -1.27561	PH10 .88852 .67971 08619	CA . 02852 . 01834 00420	CN .37986 .44859 .02837	CSL -,00084 -,00120 -,00015	CLN .00129 .00108 00009	
	RUN	394/0	H 1/Na	3.34 GR	GRADIENT INTERVAL		00/ 5.00			
02 15.083 14.830	ALPHAC 2.141 4.433 GRADIENT	8000	BETAO 12298 12295 .00001	PHIC 5.66248 2.77127 -1.26160	PH10 .85717 .68384 07564	CA .02850 .01851 00436	CN .38690 .45644 .03034	CSL 00085 00129 00019	.00124 .00110 00006	
	RUN NO	0.395/0	RN/L ≖	3.33 GR	GRADIENT INTERVAL	7VAL = -5.	00/ 5.00			
02 29. 781 29. 790	ALPHAC 2.045 4.494 GRADIENT	BETAC 22127 22565 00179	BETAO 12536 12372	PHIC 6.17644 2.87720 -1.34699	PH10 .88750 .68440 08292	CA .03061 .01832 00502	CN .38901 .48706 .04003	CSL 00105 00143 00015	CLN .00117 .00096 00009	
	RUN NO	0. 396/ 0	RN/L =	3.33 GF	GRADIENT INTE	ERVAL = -5.	.00/ 5.00			
02 44.565 44.873	ALPHAC 2.160 4.367 GRADIENT	BETAC -,22269 -,22366 -,00044	BETAO 12330 12144 .00084	PHIC 5.88804 2.93447 -1.33798	PH10 .86363 .67831 08395	CA .03076 .01987 00493	CN .39969 .48849 .04022	CSL 00119 00146 00012	CLN .00113 .00100 00006	
	RUN NO.	10. 397/ 0	RN/L =	3.33 G	GRADIENT INTERVAL	E d	.00/ 5.00			
02 50.286 50.569	ALPHAC 2.123 4.396 GRADIENT	BETAC 22107 22250 00063	EETAO 12019 11875 .00063	PHIC 5.94619 2.90042 -1.34005	PH10 .84223 .65977 08027	CA .03103 .01974 00497	CN .39377 .8435 .04161	CSL 00108 00129	CLN .00110 .00086 00011	

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ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(DNH040) (08 OCT 75)

	න. 000. 000. 000.										
DATA	STAB ELEVON :: DX MACH ::		CLN .00139 .00126 .00128		CLN .00128 .00123 .00119		CLN .00143 .00133 .00123		CLN .00132 .00119 .00111		CLN .00128 .00128 .00110
PARAMETR1C	0000.		CSL 00048 00047 00049		CSL 00079 00058 00055		CSL 00082 00058 00070		CSL 00104 00067 00063		CSL 00126 00038 00076
	BETA E PUDDER = 10RB = DY	-5.00/ 5.00	CN .19606 .26142 .32427 .02909	00.5 /00.	CN .20851 .26983 .32955 .02674	00/ 5.00	CN .21444 .27469 .33049	00/ 5.00	CN .20418 .28291 .33940	30 / 5.00	CN . 20525 . 29642 . 35640 . 03398
		u	CA .04895 .03978 .03000 00429	H H	CA .04896 .03979 .03019	RVAL = -5.00/	CA .04873 .03992 .03098	7VAL = -5.00/	CA .05030 .03988 .03118	*VAL = -5.00/	.05177 .05177 .04114 .03249
		GRADIENT INTERVAL	PH10 1,79753 1,15912 ,86840 -,21215	GRADIENT INTERVAL	PH10 1.74014 1.10813 -20513	GRADIENT INTERVAL	PH10 1,71279 1,12877 .83988 20634	GRADIENT INTERVAL	PH10 1.70846 1.03612 .79139	GRADIENT INTERVAL	PH10 1.68114 1.10861 .76992
	000	3.33 GR	PH1C -84.40830 1.17152 .62992	3.32 GR	PHIC -26.59500 1.05741 .63211 6.31765	3.32 GR	PHIC 63.05230 1.09000 .63994 -15.17967	3.32 GR	PHIC -15.70640 1.03042 .60193 3.87923	3.33 GR/	PH1C -18.37600 -88899 -47959 -47959
	19.0000 IN. XO .0000 IN. YO 75.0000 IN. ZO	RN/L *	BETAO 12383 12449 12570	FN/L =	BETAO 12340 12280 12015	RN/L =	BETAO 12556 12467 12001	RN/L =	BETAO 12009 11619 11327 00152	RN/L .	BETAO 11880 12496 11079
	H H H	0 /104 0	BETAC 04526 04739 04833 00070	. 402/ O	BETAC 04561 04595 04855 00062	. 403/ 0	BETAC 04725 04658 04791	0 /404 .	BETAC 04369 04618 04516	. 405/ 0	BETAC 03979 03976 03620
REFERENCE DATA	SG.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 004 2.318 4.401 GRADIENT	RUN NO.	ALPHAC 091 2.490 4.405 GRADIENT	RUN NO	ALPHAC . 024 2.449 4.293 GRADIENT	RUN NO	AL PHAC 155 2 . 568 4 . 303 GRADIENT	RUN NO	ALPHAC 120 2.563 4.329 GRADIENT
REFER	2690.0000 474.8100 935.6800		02 3.048 3.021 3.274		02 7.066 7.198 7.335		02 9.793 9.766 9.745		02 14.781 14.685 14.592		02 29.804 29.944 29.835
	91 M M H										

2€.1	. 27		5.000 5.000 .600			1 22 1		5.000 .000 .000 .500						
PAGE) (08 OCT	DATA	STAB # ELEVON # DX # MACH #		CLN .00125 .00117 .00112 00003	1) (08 OCT	DATA	STAB = ELEVON = DX = MACH =		CLN .00126 .00113 00006		CLN 00116 00110	·	CLN .00104 .00111
	(DMH040)	PARAMETR1C	0000*		CSL 00114 00091 00092	(1 +0HNO)	PARAME TRIC	0000.		CSL 00038 00036		CSL 00073 00048		CSL 00046 00054 00003
		_	BETA # RUDDER # 10RB # DY #	3/ 5.00	CN .20535 .29631 .37999			BETA = RUDDER = 10RB = DY	00/ 2.00	CN . 25483 . 31655 . 02856	.007 5.00	CN .26199 .32564 .02704	.00/ 5.00	CN . 26826 . 33116 . 02793
	(ORBITER DATA)			VAL ± -5.00/	CA .05277 .04299 .03167 00459	(ORBITER DATA)			= -5.	CA . 04034 . 03070 00446	ii R	CA .04094 .03067 00436	٠ ا	CA .04051 .03065 00438
	0251			GRADIENT INTERVAL	PH10 1.70509 1.08198 77014 20639	AT1 0251 (OR			GRADIENT INTERVAL	PH10 .88790 .65669	GRADIENT INTERVAL	PHIO .89942 .65598	GRADIENT INTERVAL	PH10 .86976 .65318 09618
38	8) 747/1 ATI			3.33 GRA	PH1C -22.46140 -91512 -49076 5.19729	747/1			2.97 GR/	PH1C .94918 .48885 21302	2.96 GR	PHIC .97846 .46870 21656	2.98 DR	PH1C .85236 .44953 18334
DATA - CA23B	14-120(CA23B)		000 IN. XO 000 IN. YO 000 IN. ZO	RN/L =	BETA0 12018 11965 11246 00163	14-120(CA23B)		.0000 IN. XO .0000 IN. YO	RN/L	BETA0 09515 09550	= 7/N;	BETA0 -,09548 -,09540	RN/L =	BETA0 09512 09551
TED SOURCE	ARC		1109.0000 0000 375.0000	0 /90+ .	BETAC 03758 03906 03830	ARC	•	1109	0. 411/ 0	BETAC 03541 03664 00057	0. 412/ 0	BETAC 03560 03628 00029	D. 413/ 0	BETAC 03337 03503 00074
TABULATED		CE DATA	FT. XMRP YMRP ZMRP	RUN NO.	ALPHAC 091 2.446 4.476 GRADIENT		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 2.137 4.298 GRADIENT	RUN NO	ALPHAC 2.085 4.439 GRADIENT	RUN NO	AL PHAC 2.218 4.469 GRADIENT
87. R)	REFERENCE DATA	2690.0000 SQ.F' 474.8100 IN. 936.6800 IN.		DZ 44.515 44.728 44.671		REFEREN	2690,0000 SQ. 474,8100 IN 936,6800 IN		02 3.328 3.325		02 6.838 7.184		9.770 9.770 9.780
F 22 MAR 75	: 							# # # # !J						
OATE TE	5		SREF LREF BREF SCALE					SREF LREF BREF SCALI						

PAGE 242	OCT 75)		8 000 000 000 000 000 000 000 000 000 0							0CT 75)		5.000 5.000 300					
α.	80)	C DATA	STAB = ELEVON = DX =		CLN .00114 .00109		CLN .00112 .00110		CLN .00102 .00103	80) (DATA	STAB = ELEVON = DX MACH =		CLN .00077 .00072		CLN .00059 .00082	
	(DNH041)	PARAMETRI	.000.		CSL 00090 00078		CSL 00093 00093		CSL 00092 00075	SHOHNO)	PARAME TRIC	0000.		CSL -,00035 -,00038 00002		CSL 00033 00028	
	Α)		BETA = RUDDER = 10RB = 0Y	.00/ 5.00	CN . 26890 . 34091 . 02934	-5.00/ 5.00	CN .28735 .36064 .03331	.00/ 5.00	CN .29440 .37302 .03716	_		BETA BRUDDER BIORB BOY	.00/ 5.00	CN .25803 .31937 .03049	.00/ 5.00	CN .27414 .33612 .03015	
	(ORBITER DATA)			i,	CA .04187 .03088 00448	ıı	CA .04230 .03130 00500	INTERVAL = -5.	CA .04284 .03206 00509	(ORBITER DATA)			i.	CA .04183 .03305 00436	i Č	CA .04131 .03207 00449	
	0251			GRADIENT INTERVAL	PH10 .94498 .69804	GRADIENT INTERVAL	PHIO .89338 .66870 1021	GRADIENT INTE	PH10 .89411 .64395 11826	A71 0251 (0			GRADIENT INTERVAL	PH10 .98557 .73034 12683	GRADIENT INTERVAL	PH10 .92205 .71971 09841	
	23B) 747/1 ATI		000	2.97 61	PH1C .99901 .44801 22448	2.97 GF	PH1C ,82645 ,41654 18633	2.97 GF	PHIC .76327 .42333 -,16070	1/247			1.98 SR	PHIC .43017 .23072 09912	1.98 GR	PHIC .39307 .23609 07635	
	ARC 14-120(CA23B)		9.0000 IN. XO .0000 IN. YO 5.0000 IN. ZO	RN/L ▼	BETAO 09972 10173 00082	RN/L =	BETAO 09737 09720	RN/L =	BETAO 09702 09264 .00207	14-120(CA23B)		0000 IN. YO 0000 IN. YO	RN/L *	BETAO 10574 10352 .00110	RN/L =	BETAO 10101 10423 00157	
	AR		110	40. 414/ D	BETAC 03463 03469 00003	NO. 415/ 0	BETAC 03194 03206 00006	NO. 416/ 0	BETAC 02950 03196 00117	ARC		1109	0. 421/ 0	BETAC 01658 01698 00020	J. 422/ 0	BETAC 01571 01790 00106	
		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	ALPHAC 1.986 4.441 GRADIENT	RUN	ALPHAC 2.215 4.415 GRADIENT	RUN Y	ALPHAC 2.214 4.330 GRADIENT		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	ALPHAC 2.209 4.221 GRADIENT	RUN NO	ALPHAC 2.291 4.347 GRADIENT	
		REFER	2690.0000 474.8100 936.6800		02 14.789 14.819		02 29.638 29.826		DZ 44.438 44.694		REFERE	2690.0000 S 474.8100 1 936.6800 1		DZ 3.128 3.123		02 7.085 7.303	
		;	SREF = LREF = BREF = SCALE =									SREF = BREF = SCALE =					

PAGE NTA) (DNHO42) (08 OCT BETA = .000 STAB = .000 ELEVON = .000 ELEVO	
BETA # PARA PARA PARA PARA PARA PARA PARA P	
10 10 10 10 10 10 10 10 10 10 10 10 10 1	! !
)
BE RR DATA) VAL = -5.00/ CA .03248 00460 VAL = -5.00/ CA .04279 .03288 00503 VAL = -5.00/ CA .04430 CA .04430 CA .04430 CA .04430 CA .00530 VAL = -5.00/ CA .04478 .00478)
3 GRADIENT INTERVAL = -5.0 11C PHIO CA 14607 .98456 .04246 107111245200460 3 GRADIENT INTERVAL = -5.0 1472 .94742 .0328 1472 .94742 .0328 1472 .94742 .0328 1473 .95078 .04430 157 GRADIENT INTERVAL = -5.0 15851 .70520 .0328 16906311698 .04430 17 GRADIENT INTERVAL = -5.0 19389 .005316 19389 .00478	r0001
8 4 4 5 8 4 5 6 6 6 7 6 6 7 7	09653
A - CA23 20(CA236 1N. XO 1N. XO 1N. ZO 10326 10167 20077 20077 20077 200068 21AO 200068 21AO 200068 200068	• 6000° -
	.00033
TABULATED TEFERENCE DATA 0000 SQ.FT. XMRP = 6800 IN. YMRP = 6800 IN. ZMRP =	GRADIENT
22 MAR 76 REFEREN REFEREN 2890.0000 SO 144.88 14.575 07 07 07 07 07 07 07 08 08 08	
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ARC 14-120(CA23B)

5.000 99 OCT ELEVON PARAMETRIC DATA (DNH043) CLN 00108 00122 00110 00096 000096 000099 CLN .00104 .00105 .00105 .00099 .00098 .000 CCLN .00109 .00121 .00118 .00104 .00088 .00084 CSL -.00160 -.00155 -.00174 -.00108 -.00256 5.00 CSL -.00163 -.00127 -.00142 -.00169 -.00106 CSL -.00140 -.00111 -.00185 -.00180 -.00130 -.00777 -.00231 -5.00/ 5.00 -5.00/ 5.00 BETA -5.00/ CN -.00857 -.23600 .33673 .43290 .55217 .67306 .77856 CN 24640 33729 43339 55160 55160 67531 78307 CN -.01156 .24719 .33800 .44119 .55656 .67729 .78068 GRADIENT INTERVAL GRADIENT INTERVAL GRADIENT INTERVAL CA .05098 .04153 .02942 .01751 .01316 .06225 .05087 .04142 .04142 .01709 .01226 06233 05188 04159 02969 01719 01137 PHIO --07861 .00976 --03124 --03339 --03358 --03358 PHIO -.38120 .04497 .03532 .01845 -.00883 .01521 -.01533 3.31 222 #ETAO . 00619 .006108 . 00108 .00449 . 00597 . 00721 1109.0000 IN. 375.0000 IN. 18. BETAO
-.00485
-.00360
-.00396
-.00271
.00160
-.00326 BETAO -.00168 -.00898 -.00326 -.00031 -.00046 -.00067 RN/L = RN/L = ALPHAO 4.518 6.328 8.269 10.303 12.406 14.397 GRADIENT ALPHAO - . 729 4 . 597 6 . 440 8 . 441 10 . 411 12 . 376 14 . 347 GRADIENT 431/ 0 ALPHAO -.608 4.480 6.499 8.438 10.448 12.427 14.433 0 433/ 0 435/ . 9 RUN NO. XMRP YMRP ZMRP 2 Ş DZ 2.284 2.235 1.862 2.534 2.332 2.332 02 17.824 20.582 20.432 20.388 20.388 20.672 **Z** 02 37.645 40.709 40.387 40.324 40.324 40.577 40.395 REFERENCE DATA 50.FT. IN. IN. 2690.0000 9 474.8100 1 936.6800 1 SREF LREF BREF SCALE

35 242 30	CT 75)		1	5.000 5.000			001 75)		000							
PAGE	(DNH0+4) (99 OCT	PARAMETRIC DATA		. 000 ELEVON .		CLN .00119 .00119 .00108 .00151	60) (S40HNO)	PARAMETRIC DATA		.000		CLN0002800014000130005300008		CLN 00065 00011	.00014 00023	
		u	•	BETA	.00/ 5.00	CSL 00108 00139 00121 00129				BETA ≖	.00/ 5.00	CSL	00/ 5.00	CSL 00238 00256	00213 00240	-,000235 -,00004
					i.	CN .34342 .43677 .56041 .68140 .76258					# 5	. 16673 . 25913 . 24913 . 45791 . 45791 . 58988 . 69366	INTERVAL = -5.00	CN 08652 .16107	.36075	. 58577 . 58577 . 04768
		14-120(CA238) 0351		× × × × × × × × × × × × × × × × × × ×	GRADIENT INTERVAL	CA .02180 .01019 00352 01002 00000					GRADIENT INTERVAL	CA .02808 .01875 .00735 00512 01126 01041	SRADIENT INTE	CA .03625 .02862	.00572	00674 01115 00147
38	(B) 0351				3.34 GR/	PH10 . 06106 . 04841 00076 . 03043 . 01867	3B) 03S1				3.33 GF	PH10 30705 30705 26293 17051 18831 1884	3.31	PH10 2.35875 - 26128	14105	-, 18572 -, 14556 -, 50456
DATA - CA23B	14-1201642				0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L *	BETAO 00679 00014 00054 00055 00050	18-120(CA23B)	•	. 0000 1N. XO . 0000 1N. YO . 0000 1N. ZO	RN/L =	BETAO .03857 .03400 .03805 .04111 .03678	RN/L ≍			78587. 03109 54500
ATED SOURCE DATA) K		= 1109. = 375.	. 441/ 0	ALPHAO 6.381 8.325 10.419 12.411 14.003 GRADIENT	ARC			1109	451/ 0	ALPHAO 4.557 6.357 8.320 10.372 12.477 14.400 GRADIENI	, u	ALPHA0 792	6. 464 8. 464 8. 466	10.508 12.332 GRADIENT
DATE 35 MAD 76 TABULATED			REFERENCE DATA	SREF = 2690.0000 SO.FT. XMRP LREF = 474.8100 IN. YMRP BREF = 936.6800 IN. ZMRP SCALE = .0125		DZ 60.484 60.085 60.085 60.708 57.099			REFERENCE DATA	SREF = 2690,0000 SQ.FT. XMRP LREF = 474.8100 IN. YMRP BREF = 936.6800 IN. ZMRP SCAIF = .0125	,	02 02 2.23 2.23 2.239 1.921 1.521 2.551	צ אסע	20 273.71	20.172 20.172 90.313	20.516 20.115

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DATA	
SOURCE	
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ARC 14-120(CA23B) 03S1

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PARAMETRIC DATA	.000 ELEVON =	
Q.	11	
	BETA	
	222	
	zzz	
	1109.0000 IN. XO .0000 IN. YO 375.0000 IN. ZO	
	= M	
	XMRP	
DATA		i
REFERENCE DATA	2690.0000 50.FT. 474.8100 IN. 936.6800 IN.	
	SREF LREF BREF SCALE	

(09 OCT 75) PAGE 246

(DNH045)

	ć	(09 OCT 75)
	CLN 00045 00019 00017 00075 00075 00005	(DNH046)
-5.00/ 5.00	CSL	
	CN 08870 -15554 25704 35135 45887 58458 58458 69354	
SRADIENT INTERVAL .	CA . 03519 . 02920 . 01954 . 00723 - 00564 - 01013 - 00916	
3.31 GR	PH10 1.55562 27658 16026 14372 14372 0831	38) 0251
RN/L =	BETAO . 02004 . 02127 . 02352 . 02510 . 02059	14-120(CA23B)
. 453/ 0	AL PHAO -, 738 -, 738 4, 4, 1, 1 6, 397 8, 474 10, 454 12, 438 14, 487 SRADIENT	ARC
RUN NO.	DZ 37.990 39.923 40.358 40.425 40.425 40.425 40.404	

	000 .	
C DATA	.000 ELEVON =	
PARAMETRIC DATA	000.	
PA	BETA =	20 2
		/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5 00 / 5 00
	1109.0000 IN. XO .0000 IN. YO 375.0000 IN. ZO	
ITA	XMRP YMRP #	RUN NO. 461
REFERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.	
	SREF = LREF = BREF = SCALE =	

REFERENCE DATA

		z	-000R2	06000	20000	1000	10000	00000	acnon.	.00038	.00060	.00003
	-5.00/ 5.00	153	00193	00173	- 00157	ac. 100	0.00		90100.	00151	00204	.00008
	NTERVAL = -5.	S	08058	.03775	15055	24053	01212	מינות מינ מינות מינות מ		20C/C.	67595	.04899
	RADIENT INTE	V V	.05764	. 05492	0.480	0.3827	3000	יייייייייייייייייייייייייייייייייייייי	1000	CAROO.	. 01380	00202
_	3.31 66	PH10	-18.92550	P. 13035	1.06202	.76578	52783	1 1 1 1 1	00000	90100	. 28683	4.31743
5/5. UDDU : 5/5	RN/L =	PETA0	- 08009	08379	08304	08576	07712	#U4/LU -	17770		07098	00064
() ()	. 461/0	AL PHA0	03 .	2.253	181.1	6.430	9.405	10.328	מ		14.30B	GRADIENT
Y . 7	RUN NO.	20	58.852	40.088	+0.654	40.159	40.206	40.248	1000		, 40h.	_

REFERENCE DATA

SREF LREF BREF SCALE

TABULATED SOURCE DATA - CA238

(21 OCT (C40HNO) .000

PARAMETRIC DATA 0251 ARC 14-1201CA23B)

EL. VON DZ 49.39420 51.00510 02 48.93470 50.66530 00000 49.63740 50.29570 .00000 DZ 48.86470 50.29140 .00000 02 49.00850 50.75890 .00000. .000 CLN .00102 .00051 .00000 CLN .00075 .00056 .00000 CLN .00094 .00063 .00086 .00057 .00000 CLN .00097 .00043 5.00 5.00 5.00 5.00 5.00 BE TA DZ CSL -.00167 -.00185 CSL -.00164 -.00153 CSL -.00130 -.00172 CSL -.00144 -.00192 .00000 CSL -.00144 -.00157 .00000 -5.09 -5.00/ -5.00/ -5.00/ -5.00/ GRADIENT INTERVAL GRADIENT INTERVAL GRADIENT INTERVAL INTERVAL CN . 22821 . 44510 . 00000 CN . 22592 . 44271 . 00000 INTERVAL CN . 22831 . 45821 . 00000 CN .21560 .45266 .00000 CN .21578 .45317 .00000 GRADIENT GRADIENT CA .04087 .01449 CA .04062 .01426 .00000 CA .04162 .01367 .00000 CA .04169 .01327 .00000 CA .04059 .01318 RN/L = 3.32 = 3.32 = 3.30 = 3.31 = 3.31 PH10 .71879 .42532 .00000 PH10 .87503 .44132 PH10 .82679 .47009 PH10 .80403 .42535 PH10 .83920 .41249 = 1109.0000 IN. XO = .0000 IN. YO = 375.0000 IN. ZO RN/L 472/ 0 RN/L RN/L 475/ 0 RN/L BETA0 -.08606 -.08502 BETA0 -.08252 -.07754 BETA0 -.07507 -.07687 .00000 BE 1 AO -. 08604 -. 07504 . 00000 BETA0 -.09231 -.08057 .00000 474/ 0 RUN NO. 473/ 0 471/0 ALPHAO 5.891 10.503 GRADIENT ALPHAO 5.884 10.481 GPADIENT ALPHAO 6.055 10.519 GRADIENT ALPHAO 5.995 10.412 GRADIENT ALPHAO 5.974 10.420 GRADIENT RUN NO. RUN NO. RUN KO. RCN NO. 2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN. 0x 19.661 20.118 DX 14.701 15.158 0X -.046 -218. DX 4.734 5.194 9.687 10.187

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(DNH048) (21 OCT 75)

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PARAMETRIC DATA	.000 ELEVON =		DZ 2.71022 3.37922 .00000		DZ 1.96064 3.68903 .00000		. DZ 2.05427 3.95290 .00000		DZ 2.33897 3.53795 .00000		DZ 1.87798 3.29780 .00000
PA	BETA = DZ *	5.00	CLN .00085 .00062	5.00	CLN .00094 .00060	5.00	CLN .00100 .00073	5.00	CLN .00101 .00060	5.00	CLN .00101 .00056
	96 DZ	-5.00/	CSL 00191 00260	т -5.007	CSL 00194 00196 00000	-5.00/	CSL 00164 00213	-5.00/	CSL 00200 00197	-5.00/	CSL 00195 00227 .00000
		GRADIENT INTERVAL	CN . 22954 . 46224 . 00000	INTERVAL	CN .22012 .45537 .00000	INTERVAL	CN .21788 .44893 .00000	INTERVAL	CN .23040 .44569	GRADIENT INTERVAL	CN .21857 .44955
		GRAD LEN	CA .04020 .01240 .00000	GRADIENT	CA .04107 .01314 .00000	GRADIENT	CA .04123 .01341 .00000	GRADIENT	CA .03984 .01368 .00000	GRADIEN	CA .04094 .01323 .00000
	IN. XO IN. YO IN. ZO	. = 3.30	PH10 .71421 .39522 .00000	3.31	PH10 .77322 .40258	3.35	PH10 .81070 .34898 .00000	. * 3.31	PH10 .73259 .41593	3.31	PH10 .73598 .36727 .00000
	. 375.0000 11	481/ 0 RN/L	BETAO 07543 07241 .00000	482/ 0 RN/L	BETAO 07893 07328	483/ 0 RN/L	BETAO 08345 06343 .00000	484/ 0 RN/L	BETAO 07712 07520	1/NC 0 /58h	BETAO 07512 06647
DATA	XMRP = ZMRP =	RUN NO.	ALPHAO 6.062 10.557 GRADIENT	RUN NO.	ALPHAO 5.859 10.488 GRADIENT	RUN NO.	AL PHAO 5.908 10.472 GRADIENT	RUN NO.	ALPHAO 6.043 10.416 GRADIENT	RUN NO.	ALPHAO 5.858 10.427 GRADIENT
REFERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		0X -, 066 -, 194		0X 4.719 5.154		0x 9.696 10.116		DX 14.663 15.113		0x 19.772 20.191
	SREF = LREF = BREF = SCALE =										

642	15)		0000										
PAGE	(08 OCT 7		11 11 11 11 11 11 11 11 11 11 11 11 11		CPS2 23897 24396 24212		CPS2 22578 24359 24357		CPS2 23762 24291 25046 00279		CPS2 23447 24374 24908 00326		CPS2 23749 24654 24818 00253
	(ENH008)	PARAMETRIC DATA	000 STAB 000 ELEVON 000 DX 000 MACH		CPS1 -,19639 -,19250 -,20307 -,00156		CPS1 18264 19396 20230		CPS1 -, 19179 -, 19692 -, 20951 -, 00381		CPS1 17545 19765 20100		CPS1 18230 20175 00528
	•	PARAM	11 H II II	5.00	CPE3 - 16942 - 16194 - 16403	5.00	CPE3 16013 15916 00012	5.00	CPE3 -,14490 -,13658 -,12975	5.00	CPE3 12254 12730 11097	5.00	CPE312070121781078000278
	R DATA)		BETA RUDDEF 10RB DY	-5.00/	CPB3 26726 26299 25709	-5.00/	CPB3 25874 26290 25742	5,007.	CPB3 -,27082 -,26019 -,26920	-5.00/	CPB3 25973 26586 26938	-5.00/	CPB3 26255 26500 27269
	O2SI (ORBITER			INTERVAL	CPB2 27890 27398 27367	INTERVAL	CPB2 27515 28463 27606	INTERVAL	CPB2 28083 27162 28178	INTERVAL	CPB2 27569 28105 28221	INTERVAL	CPB2 28095 28279 28495
	747/1 AT1 02			GRADIENT	CPB1 24690 24396 24586	GRADIENT	CPB1 24239 24761 24304 00023	GRADIENT	CP81 24684 25207 00101	GRADIENT	CPB1 23527 24508 24855 30298	GRADIENT	CPB1 24389 25378 00232
- CA23B	-120(CA23B) 7		IN. X0 N. Z0 N. Z0	L = 3.35	CPC 05783 06749 00233	1 = 3.35	CPC 04732 05794 06196	1. = 3.36	CPC 05639 05524 06578	1 3.35	CPC 04544 05749 06636 00465	1 = 3.35	CPC 05191 05940 06704
SOURCE DATA	ARC 14-12		1 000 . 0000 1 0000 . 375 . 0000	91/ 0 RN/L	XYCP .30972 .25493 .19175	82/ 0 FN/L	XYCP .36613 .31904 .19936 03637	83/ 0 RN/L	XYCP .40309 .45510 .21189	84/ 0 RN/L	XYCP .37674 .31875 .17157	85/ 0 RN/L	XYCP .43476 .34404 .13888
TABULATED		ATA	XMRP = ZMRP =	RUN NO.	XZCP .05446 .07185 .07689	RUN NO.	x2CP .04407 .06231 .06806	RUN NO.	xzcP .03911 .06077 .06546	RUN NO.	xZCP .03539 .05589 .05058	RUN NO.	XZCP .02722 .04862 .05195
		REFERENCE DATA	5000 SO.FT. 8100 IN. 5800 IN.		ALPHAC . 192 2.364 4.308 GRADIENT		ALPHAC 126 2.378 4.361 GRADIENT		ALPHAC - 141 2.414 4.401 GRADIENT		ALPHAC 014 2.461 4.492 GRADIENT		ALPHAC 028 2.464 4.306 GRADIENT
22 MAR 76			= 2690.0000 = 474.8100 = 935.6800 E = 0125		02 4.365 2.954 3.443		02 6.994 7.541 7.335		02 9.751 9.637 9.522		02 14.752 15.063 15.188		02 29.536 29.860 29.902
DATE			SREF LREF BREF SCALI				ORIGINA OF POOI	T,	PAGE IS UALITY				

5.000 5.000 .000 250 5 PAGE 2 8 STAB ELEVON DX MACH PARAMETRIC DATA (ENH008) 6.000 BETA RUDDER 1 10RB : 747/1 ATI 02SI (ORBITER DATA) ARC 14-120(CA23B) 222 z z z 1 0000.0011 1 0000. 375.0000 XMRP YMRP ZMRP REFERENCE DATA 50.FT. 2690,0000 9474.8100 936.6800 125 SREF LREF BREF SCALE

CPS2 -.24395 -.24798 -.26083 -.00365 CPS2 -.24367 -.24492 -.25330 -.00206 CPS1 -.19719 -.21025 -.00268 CPS1 -.19258 -.19930 -.20875 -.00357 CPE3 -.16619 -.14552 -.13955 -.00617 CPE3 -.16401 -.15036 -.14957 .00338 5.00 5.00 CPB3 -.27309 -.27408 -.27404 -.00023 CP83 -.27619 -.27166 -.28503 -.00175 -5.00/ -5.00/ GRADIENT INTERVAL GRADIENT INTERVAL CP82 -.28982 -.28682 -.29844 CPB2
-.28701
-.28150
-.28732 CPB1 -.25602 -.24704 -.25304 .00085 CPB1 -.25313 -.25144 -.26425 -.00230 3.35 3.34 CPC -.06166 -.05433 -.06407 CPC -.05549 -.05911 -.07619 XYCP .50828 .38713 .13138 XYCP .54553 .40675 .13242 0 //8 86/0 XZCP . 02216 . 04330 . 04626 . 00564 XZCP .02062 .04196 .04468 RUN NO. RUN NO. ALPHAC -.065 2.496 4.342 GRADIENT ALPHAC -.106 2.490 4.334 GRADIENT DZ 44.873 44.666 45.029 DZ 50.039 50.412 50.166

ARC 14-120 (CA23B) 747/1 AT1 02S1 (ORBITER DATA)

08 OCT 75

(ENH003)

-1.000 5.000 .000 STAB ELEVON : DX MACH PARAMETRIC DATA 000. 8.000. BETA RUDDER 1 10RB 1 228 375.0000 IN. XMRP YMRP ZMRP REFERENCE DATA 2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN. SREF LREF BREF SCALE

-,24431 -,25482 -,24652 -,00060 CPS2 -.24324 -.24352 -.25752 -.00309 CPS1 -.20578 -.20947 -.20671 CPS1 -.19763 -.19579 -.20723 CPE3 -.12528 -.13169 -.12254 .00063 5.00 5.00 CPB3 -.26542 -.26615 -.26709 -5.00/ -5.00/ -.27581 -.28179 -.00104 INTERVAL INTERVAL GRADIENT GRADIENT CPB1 -.25064 -.25347 -.00067 3,35 RN/L = 3.35 CPC -.06801 -.07263 -.06990 XYCP .16540 .12947 -.03980 92/0 91/0 XZCP .04871 .05676 .05873 PUN NO. PCN NO. AL PHAC 274 2.380 4.334 GRADIENT 02 8.075 7.276 7.800 DZ 9.930 10.158 9.843

CPE3 -.12197 -.11580 -.12965 -.00152 CP83 -.26117 -.25632 -.26848 -.00147 CPB2 -.27118 -.27285 -.28668 CPB1 -.24561 -.24458 -.25431 -.00186 CPC -.06344 -.06061 -.06651 -.00060 XYCP .24790 .12649 -.04508 XZCP .04855 .05428 .05624 .00160 ALPHAC -.015 2.498 4.339 GRADIENT

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TABULATED SOURCE DATA - CA23B

PAGE 251

747/1 AT1 0251 (ORBITER DATA) (ENH009) (08 OCT 75)	PARAMETRIC DATA	BETA * .000 STAB = -1.000 RUDDER * .000 ELEVON * 5.000 10RB * 8.000 DX * .000 DY * .000 MACH * .600	INTERVAL = -5.00/ 5.00	CPB2 CPB3 CPE3 CPS1 CPS2 -,26582 -,25517 -,11122 -,18200 -,22590 -,28693 -,26909 -,12674 -,20816 -,25020 -,28119 -,26580 -,12269 -,20022 -,24515 -,00370 -,00262 -,00284 -,00455 -,00493	INTEFVAL = -5.00/ 5.00	CPB2 CPB3 CPE3 CPS1 CPS22837427559135032025524722283182704213024204452549929524281101372420930259210024400104000350014800275	INTERVAL = -5.00/ 5.00	CPB2 CPB3 CPE3 CPS1 CPS22835027297134491987324480297092826114211213422613030204282861353121255262620040200218000290030700391	INTERVAL = -5.00/ 5.00	CPB2 CPB3 CPE3 CPS1 CPS22815027159130062012224602283572710612838206112492329134280991259721144255570020800195000900022600228
17/1 AT1 02S			GRADIENT	CPB1 23708 24887 24615 00223	GRADIENT	CPB1 24853 24940 26215 00292	GRADIENT	CPB1 25349 25736 26369	GRADIENT INTERVA	CPB1 25050 24949 65736
RC 14-120(CA23B) 74		0000 X X X X X X	L = 3.35	CPC 05002 06288 06534 00357	L = 3.35	CPC 06462 06401 07558	1 = 3.34		1.35	CPC 06365 05210 06996
ARC 14-12		1 000.0011 .0000 375.0000	93/ 0 RN/L	XYCP .27644 .09345 06079	94 / 0 KN/L	XYCP . 26449 . 04725 07894	95/ 0 RN/L	XYCP .29437 .05014 07877	96/ 0 HN/L	XYCP .24386 .01257 12941
	ATA	XMRP YMRP = ZMRP =	RUN NO.	XZCP .04499 .05160 .05208	RUN NO.	XZCP .03987 .04522 .04513	RUN NO.	XZCP .03462 .04115 .03959	RUN NO.	XZCP .03541 .03964 .03795
	REFERENCE DATA	.0000 SQ.FT. .8100 IN. .6800 IN.		ALPHAC 101 2.534 4.322 GRADIENT		ALPHAC 027 2.539 4.365 GRADIENT		ALPHAC 192 2.406 4.485 GRADIENT		ALPHAC 078 2.550 4.393 GRADIENT
	u	SREF = 2690.0000 LREF = 474.8100 BREF = 936.6800 SCALE = .0125		02 14 862 14 490 15 109		02 29.926 29.957 29.720		02 44,465 44,798 44,826		02 50.555 50.407 50.452

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157		5.000 5.000 .000 .600		~ ៤២០		ល្ខ ង ល្ខំ		ញល្÷∺		74 50 50		- 50 00 00 00 00 00 00 00 00 00 00 00 00 00
(08 OCT		ы н н 8		CPS2 -,18281 -,22392 -,23236		CPS2 -, 22433 -,23078 -,23913 -,00322		CPS2 22789 23545 24544		CPS2 22374 23767 24856		CPS2 23591 23195 25082
(ENHO10)	TRIC DATA	.000 STAB .000 ELEVON .000 DX .000 MACH		CPS1 13514 17977 19315 01413		CPS1 17316 18687 19538		CPS1 18571 18716 19575 00213		CPS1 17265 19230 19781		CPS1 18667 18155 19925
3)	PARAMETRI	OD	5.00	CPE3 05073 09575 09406	5.00	CFE3 08575 09957 09876	5.00	CPE3 ~.09898 10015 09715	5.00	CPE3 09322 11164 11200 00427	5.00	CPE3 12065 1100 13305
DATA		SETA RUDDER 10RB DY	-5.00/	CP83 20019 24399 25706	-5.00/	CPB3 24805 25538 26234	-5.00/	CPB3 25959 25694 26633	-5.00/	CPB3 24466 25996 27327	-5.007	CPB3 26080 25873 27555
OZSI (ORBITER DATA)			INTERVAL =	CP82 21478 25530 27049 01356	INTERVAL .	CPB2 -, 26324 -, 26914 -, 27422	. INTERVAL .	CPB2 27112 27365 08298	INTERVAL .	CP82 26001 28172 28921	INTERVAL	CPB2 26918 27253 28831
747/1 AT1 02			GRADIENT	CPB1 18225 22526 24015	GRADIENT	CPB1 22779 23607 24493	GRADIENT	CPB1 23444 23571 24412	GRADIENT	CPB1 23142 24696 25201 00462	GRADIENT	CP81 23382 23778 24949 00337
14-120(CA23B) 7			L = 3.39	CPC .01292 03956 04921	L = 3.38	CPC 03644 04640 05311	L = 3.37	CPC 04920 04815 05407 00100	1. 3.36	CPC 03895 05221 06072	' ₹ 3.35	CPC 05018 04738 05862
ARC 14-18		1 09.000.1 1 0000. 375.0000	01/ 0 RN/L	XYCP .24686 .08905 06632	02/ 0 FN/L	XYCP .29277 .10363 09256	03/ 0 RN/L	XYCP .29737 .07999 08905	04 / 0 RN/L	XYCP .38200 .01953 -,13450	05/ 0 RN/L	XYCP .39880 .02428 13604
	ATA	XMRP YMRP #	RUN NO.	XZCP .05354 .05571 .05666	RUN NO.	XZCP .04784 .05270 .05297	RUN NO.	XZCP .04499 .04988 .05010	RUN NO.	XZCP .03970 .04378 .04367	RUN NO. 1	XZCP .03717 .04024 .03909
	REFERENCE DATA	0000 SQ.FT. 8100 IN. 6800 IN. 0125		ALPHAC 132 2.303 4.270 GRADIENT		ALPHAC 205 2.335 4.346 GRADIENT		ALPHAC 178 2.367 4.381 GRADIENT		ALPHAC 108 2.360 4.407 GRADIENT		ALPHAC 111 2 . 422 4 . 429 GRADIENT
		= 2690. = 474. = 936.		02 6.742 7.349 7.463		02 10.009 10.088 10.447		02 15.028 14.812 15.043		02 29.734 30.254 29.860		DZ 44.868 45.183 45.129
		SREF LREF BREF SCALI										

PAGE 253	10) (08 OCT 75)	C DATA	STAB = 5.000 ELEVON = 5.000 DX = .000 MACH = .500		CPS1 CPS2190122421518532237192029424451	(24 TOB 0CT 75)	C DATA	STAB = -1.000 ELEVON = 5.000 DX = .000 MACH = .600		CPS1 CPS21663021789192652428420462248520091400734		CPS1 CPS2 1772623343 1949923701 2011124281 0054800208		CPS1 CPS21854723912195422409419566243630023000098
	DATA) (ENHO10)	PARAMETRIC	BETA = .000 RUDDER = .000 10RB = 8.000 DY = .000	-5.00/ 5.00	CPB3 CPE3 CP:266721357117126196129061334027408133402740800146000620	DATA) (ENHOII)	PARAMETRIC	BETA * .000 RUDDER * .000 10RB * +.000 DY * .000	-5.00/ 5.00	CPB3 CPE3 CP 24651174671 27057191331 26726186966 00503003000	-5.00/ 5.00	CPB3 CPE3 CF 26324183381 26966191511 26714186956	-5.00/ 5.00	CPB3 CPE3 CPE3 - 26872 - 18 - 18 - 18 - 18 - 18 - 18 - 18 - 1
	ATI 0251 (ORBITER			GRADIENT INTERVAL = -	CP81 CP82 C.2781 24092 27741 25330 28394 00160 00129	ATI 0251 (OPBITER			GRADIENT INTERVAL =	CPB1 CPB2 - 26704 - 25314 - 28536 - 27743 - 20552 - 00552 - 00557 - 27743 - 277443 - 277443 - 277443 - 277443 - 277443 - 277443 - 277444 - 277444 - 277444 - 277444 - 277444 - 277444 - 277444 - 277444 - 277444 - 277444 - 277444 - 277444 - 277444 - 277444 - 277444 - 277444 - 277444 - 27744 - 27744 - 27744 - 27744 - 27744 - 27744 - 27744 - 27744 - 27744 - 27744 - 27744 - 277	GRADIENT INTERVAL =	CPB1 CPB22406127655249322806424495277290011200025	GRADIENT INTERVAL =	CPB1 CPB224916283262511228351252472771200073 .00130
TABULATED SOURCE DATA - CA238	ARC 14-120(CA23B) 747/1		P = 1109.0000 IN. XO P = .0000 IN. YO P = 375.0000 IN. ZO	0. 106/ 0 RN/L = 3.34	XYCP CPC . 43543 05251 . 02533 05049 12711 05746 12705 00101	ARC 14-120(CA238) 747/1		7P = 1109.0000 IN. XO 7P = .0000 IN. YO 7P = 375.0000 IN. ZO	40. 111/ 0 RN/L = 3.34	XYCP CPC 3778502504 58 .3649706217 02 .3522106169 560060700884	40. 112/ 0 RN/L = 3.35	XYCP CPC +6 .4171403591 83 .3667905340 75 .3097705944 630239900541	NO. 113/ 0 RN/L = 3.35	XYCP CPC 3735704804 33 .3628305779 17 .3172606303 330121500332
DATE 22 MAR 76 TABUL		REFERENCE DATA	SREF = 2690.0000 SQ.FT. XMRP LREF = 474.8100 IN. YMRP BREF = 936.6800 IN. ZMRP SCALE = .0125	RUN NO	DZ ALPHAC XZCP 50.418076 .03573 50.480 2.472 .03881 50.477 4.415 .03791 GRADIENT .00052		REFERENCE DATA	SREF = 2690.0000 SO.FT. XMRP LREF = 474.8100 IN. YMRP BREF = 936.6800 IN. ZMRP SCALE = .0125	RUN NO	D2 ALPHAC XZCP 3.151 .047 .060 3.118 2.270 .0701 3.528 4.264 .080 GRADIENT .004	RUN NO	DZ ALPHAC XZCP 7.547170 .041 7.199 2.385 .058 7.175 4.257 .070 GRADIENT .006	RUN N	DZ ALPHAC XZCP 9.781 - 120 .034 9.781 2.353 .0534 9.491 4.419 .068 0.491 GRADIENT .007.

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(ENH011) (08 OCT 75)

	0000							_		0000.	•	
	0000.10		CPS2 23309 23888 25299		CPS2 23138 24840 00365		CPS2 -,23560 -,23540 -,25058 -,00317	08 OCT 75		1 H H H H		CPS2 22811 24465 24589 00426
PARAMETRIC DATA	.000 STAB .000 ELEVON 4.000 DX .000 MACH		CPS1 17809 19473 20244 00554		CPS1 17033 19068 20766 00808		CPS1 17454 19439 19817 00524	(ENH012) (PARAMETRIC DATA	.000 STAB .000 ELEVON .000 DX		CPS1 18672 19898 20788
PARAM	ин ж н Ос.	5.00	CPE3 17542 18882 00293	5.00	CPE31572167031818400177	5.00	CPE3 17481 17654 17945	J	PARAM	E H 11 H	5.00	CPE3 17478 1575 15790
	BETA RUDDER 10RB DY	-5.00/	CPB3 27046 26601 27472 00085	= -5.00/	CPB3 27278 26828 27396	5.00/	CPB3 27320 27535 27010	P DATA		BETA RUDDER TORB DY	-5.00/	CPB3 25969 25770 25625
		GRADIENT INTERVAL	CPB2 -,28754 -,28303 -,00038	INTERVAL	CPB2 -,28499 -,28236 -,28488	INTERVAL	CPB2288932836028560	O2SI (ORBITER			INTERVAL	CP82 27003 26971 27247
			CPB1 24857 24979 25560 00154	SRADIENT	C281 -,24863 -,25021 -,25346	GRADIENT	CPB1 24893 25031 25592 00150	747/1 AT! 0			GRADIENT	CPB1 23527 23995 24615
		RN/L = 3.35	CPC 04195 05428 06914	RN/L = 3.35	CPC03708051420620300541	/L = 3.34	CPC 03803 05084 05966 00473	ARC 14 -120(CA238)		N. X.	RN/L = 3.35	CPC -,04476 -,06509 -,06806 -,06557
	1109.0000 .0000 375.0000	114/0 RN	XYCP .36570 .37900 .33706	115/ 0 FN	XYCP .46504 .46214 .33114	116/ 0 RN/L	XYCP .50046 .47353 .34545 03313	ARC 14 -1		1109.0000 .0000 375.0000	21, 0 RN	XYCP . 27582 . 25475 . 16974 - 02414
DATA	XMXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	RUN NO. 1	XZCP .02590 .04697 .06414	RUN NO.	XZCP .01090 .03766 .05623	RUN NO.	x2CP .00329 .03178 .04970		DATA	XMRP YMRP ZMRP	RUN NO.	xZCP .05588 .07376 .0754
REFERENCE D	0000 SQ.FT. .8100 IN. 6800 IN.		ALPHAC 041 2.414 4.392 GRADIENT		ALPHAC 177 2.432 4.435 GRADIENT		ALPHAC 134 2 . 347 4 . 450 GRADIENT		REFERENCE D	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		ALPHAC .038 2.411 4.319 GRADIENT
	2690 474 1 936		02 14.874 14.967 14.963		02 29.907 29.803 29.693		DZ 44.786 45.057 44.452			H H H H		02 3.209 3.176 3.398
	SREF LREF BREF SCAL									SREF LREF BREF SCAL		

255	~ •		000.					(27		5.000 5.000 .000				
PAGE	08 OCT 75				CPS2 24122 23584 24505 00076		CPS2 22939 23946 23890	08 OCT 7		14 TF H		CPS2 21351 23052 24459 00738		CPS2 23315 22870 24121
	_	C DATA	STAB ELEVON DX MACH		51 9160 9757 9525 0087		51 8193 9370 0472 0492	13) (C DATA	STAB ELEVON DX MACH		CPS1 16403 19013 00620		CPS1 .17283 .17646 .18815
	(ENHO 12)	PARAMETR10	.000		0		9.1.1.1	(ENH013	PARAMETRI	. 000 . 000 6 . 000				, , , ,
		PAR/	H H H H	5.00	CPE3 07058 04715 02693	5.00	CPE3 00888 01945 00524		PAR	BETA "RUDDER "10RB "	5.00	CPE3 .50742 .51825 .52664 .00457	5.00	CPE3 .49033 .46827 .35226 02976
	: DATA)		BETA RUDDER 10RB DY	-5.00/	CPB3 26039 25852 26156 00023	-5.00/	CPB3 25285 25569 26320 00219	R DATA)		9.5.5°	-5.00/	CPB3 25380 25324 26141 00180	-5.00/	CPB3 25263 25557 55502
	SI (ORBITER			INTERVAL =	CPB2 -,26564 -,27400 -,27355	INTERVAL	CPB2 27:25 27032 27842 00146	SI (ORBITER			INTERVAL	CPB2 26651 26.23 27609 00226	T INTERVAL	CPB2 27711 26767 27262
	747/1 AT1 0251			GRADIENT	CPB1 24569 24464 24772	SRADIENT	C 281 24086 24133 24424 00071	747/1 AT1 029			GRADIENT	CPB1 23082 23701 24405 00314	GRADIENT	CPB1 24226 23519 23580
- CA23B	-120(CA23B) 74		IN. XO IN. YO IN. ZO	L = 3.34	CPC 06270 05996 06395 00024	1 = 3,34	CPC 04994 05856 06265 00278	20(CA23B) 7		IN. X0 IN. Y0 IN. Z0	1 = 3.34	CPC 03639 05312 06760 00741	RN/L = 3.34	CPC 04765 05033 05981 00263
SOURCE DATA	ARC 14-12		1 109.0000 1 .0000 1 375.0000	22/ 0 RN/L	XYCP .30610 .25116 .17945	23/ 0 FN/L	XYCP .29185 .25186 .14801 03044	ARC 14-18		1109.0000 .0000 375.0000	131/ 0 RN/L	XYCP .52140 .35723 .30161	132/ 0 RN	XYCP . 54870 . 42639 . 33585 04723
TABULATED		ITA	2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	RUN NO.	XZCP .04612 .06472 .06978	RUN NO.	xZCP .04146 .06163 .06629		ATA	XMRP YMRP ZMRP =	RUN NO.	XZCP .05851 .07320 .07743	RUN NO.	x2CP . 05981 . 05950 . 05951
		REFERENCE DATA	0000 SQ.FT. 3100 IN. 5800 IN. 0125		ALPHAC 026 2.399 4.448 GRADIENT		AL PHAC 156 2 . 439 4 . 458 GRAD IENT		REFERENCE DAT	0000 SQ.FT. 8100 IN. 6800 IN. 0125		AL PHAC . 127 2 . 255 4 . 338 GRADIENT		ALPHAC 139 360 4.357 GRACIENT
22 MAR 76		u	# 2690.0000 # 474.8100 # 936.6800		02 7.586 7.752 7.261		02 10.180 9.988 10.110			# 2690.0000 # 474.8100 # 936.6800 E = 0.0125		02 3.093 3.006 3.460		02 7.217 7.234 7.262
DATE			SREF LREF BREF SCALE			OR OF	IGINAL' P. POOR QU	AGI IAL	e k Ity	SREF LREF BREF SCAL				

ARC 14-120(CA23B) 747/1 ATI 02SI (ORBITER DATA)

(ENH013) (08 OCT 75)

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TABULATED SOURCE DATA - CA238

	000 °C		CPS2 23088 22575 23389 00051		CPS2 23986 23170 24289		CPS2 22320 23533 24901		CPS2 -,22099 -,23874 -,24392		CPS2 23361 23941 24555 00271
PARAMETRIC DATA	.000 STAB .000 ELEVON 6.000 DX .000 MACH		CPS1 17759 17021 17519 .00065		CPS1 17307 17202 18152 00172		CPS1 16591 17109 19182 00565		CPS1 16343 17555 17808 00330		CPS1 16940 17258 18837 00409
PAR	TA 00ER # #	5.00	CPE3 .28218 .25388 .25358	5.00	CPE3 .28873 .27398 .24750 00875	5.00	CPE3 .27882 .26767 .24369	5.00	CPE3 .27725 .24946 .23836 00870	5.00	CPE3 .25517 .21716 .22844 00626
	98 <u>- 2</u>	-5.00/	CPB3 26328 25664 25932	-5.00/	CPB3 25691 25775 25755	-5.00/	CPB3 25497 25427 27022	-5.00/	CP83 25927 26396 26288	= -5.007	CPB3 26164 25837 26290 00022
		GRADIENT INTERVAL	CPB2 27560 27317 27203	INTERVAL	CPB2 26943 26996 26950 00025	INTERVAL	CPB2 27045 27140 28204 00250	INTERVAL	CPB2 27095 27264 27724	INTERVAL	CPB2 27303 26757 28214
		GRADIENI	CPB1 24239 23357 23957 .00069	GRADIENT	CPB1 23254 23984 23773 00120	GRADIENT	CPB1 23352 23715 24955 00350	GRADIENT	CPB1 23131 24202 00234	GRADIENT	CPB1 23586 23537 24230 00136
	IN. X0 IN. Y0 IN. Z0	RN/L = 3.33	CPC0531705317060206020017	FN/L = 3.35	CPC 04449 05455 05798 00295	RN/L = 3.35	CPC 04075 05094 06885 00621	RN/L = 3.35	CPC 03500 05160 05913 00539	RN/L = 3.35	CPC 03782 04754 05828 00450
	1109.0000 .0000 375.0000	133/ 0 RN	XYCP .50194 .49044 .27880 -,04595	134/ 0 FN	XYCP .53098 .48094 .24904	135/ 0 RN	XYCP .48356 .42690 .19079	136/ 0 RN	XYCP .78431 .54199 .19343	137/ 0 RN	XYCP . 76044 . 60538 . 19169 12344
DATA	XMRP YMRP ZMRP	RUN NO.	XZCP .04150 .06266 .06704 .00568	RUN NO. 1	XZCP .03793 .05782 .06266	RUN NO.	xZCP .03234 .05153 .05504	RUN NO. 1	xZCP .02944 .04766 .04988 .00465	RUN NO. 1	XZCP . 02681 . 04497 . 04768
REFERENCE DAT	2690.0000 50.FT. 474.8100 IN. 936.6800 IN.		AL PHAC 237 2.407 4.371 GRADIENT		ALPHAC 191 2.411 4.441 GRADIENT		ALPHAC 063 2.435 4.393 GRADIENT		ALPHAC 049 2.450 4.474 GRADIENT		AL PHAC 057 2 . 433 4 . 464 GRAD I ENT
	SREF = 2690. LREF = 474. BREF = 936. SCALE =		DZ 10.116 9.960 9.890		02 15.175 14.756 15.038		02 30.192 29.830 29.948		DZ 44.708 44.452 44.667		02 50.164 50.275 50.038

22 MAR 76		TABULATED	SOURCE DATA	CA23B		•				PAGE 257
			ARC 14-12	14-120(CA23B) 74	747/1 ATI 0251	SI (CRBITER DATA)	DATA)		(ENH014)	1 08 OCT 75
	REFERENCE DATA	ATA						PARA	PARAMETRIC DATA	
2690.0000 \$ 474.8100 \$ 936.6800 \$	0000 SQ.FT. 8100 IN. 6800 IN. 0125	XMRP YMRP = 2 ZMRP = 4	1 109.0000 11 1 0000 . 375.0000 1	IN. X0 IN. Y0 IN. Z0			BETA RUDDEI 10RB DY		.000 STAB .000 ELEVON 6.000 DX .000 MACH	00.00 00.00 00.00
		RUN NO. 1	141/ 0 RN/L	1 = 3.33	GRADIENT	INTERVAL =	-5.00/	5.00		
02 3.324 3.528	ALPHAC 2.292 4.239 GRADIENT	XZCP .06258 .06607	XYCP . 57108 . 49714 03799	CPC 04756 06379 00834	CPB1 23131 23635 00259	CPB2 26175 26647 00242	CPB3 24653 25507 00439	CPE3 21283 21844 00289	CPS1 17477 18182 00362	CPS2 23131 24042 00468
		RUN NO.	142/ 0 RN/	1 = 3.32	GRADIENT	INTERVAL =	-5.00/	5.00		
02 7.340 7.097	ALPHAC 1.933 4.300 GRADIENT	XZCP .05455 .05873	XYCP .52363 .42885 04003	CPC 05874 04822	CP81 24302 22730 .00664	CPB2 27480 25983 .00632	CPB3 26118 24917 .00507	CPE3 22993 21226 .00746	CPS1 -,17999 -,17316 .00288	CPS2 24488 23331 .00489
		RUN NO.	143/ 0 RN/L	/L = 3.32	GRADIENT	INTERVAL =	-5.00/	5.00		
02 10.137 9.825	ALPHAC 1.946 4.403 GRADIENT	XZCP .05090 .05528 .00219	XYCP . 89064 . 54804 13943	CPC 06467 05048 .00171	CPB1 24521 23581 .00383	CPB2 27869 26892	CPB3 26182 25725 .00186	CPE3 22994 21491 .00612	CPS1 18575 17773 .00326	CPS2 24601 24070 .00216
		RUN NO.	144/ 0 RN	RN/L = 3.31	GRADIENT	INTERVAL	-5 .00/	5.00		
02 14.831 14.775	ALPHAC 1.968 4.376 GRAD!ENT	XZCP .04749 .05261	XYCP .78111 .43210 14496	CPC 05634 05811 00074	CPB1 23946 23987 00017	CPB2 27592 27546 .00019	CPB3 26259 26378 00050	CPE3 21905 21868 .00015	CPS1 17715 18418 00292	CPS2 24027 24368 00141
		RUN NO.	145/ 0 RN	RN/L = 3.31	GRADIENT	INTERVAL	-5.00/	5.00		
02 30.007 29.873	ALPHAC 1.997 4.392 GRADIENT	xzcp . 04285 . 04794 . 00212	XYCP . 72571 . 37018 14845	. CPC 05278 06798	CPB1 23729 24617 00371	CPB2 27594 28040 00187	CPB3 25798 26693 00374	CPE3 20328 20870 00226	CPS1 17280 18353 00452	CPS2 23920 24590 00280

CPS2 -.24262 -.24988 -.00298

CPS1 -.17289 -.19033 -.00717

CPE3 -.21042 -.20677 .00150

CPB3 -.26152 -.26336 -.00076

CPB2 -.28041 -.27332 .00292

CP81 -.24475 -.24153 -.00133

CPC -.06377 -.05910 .00192

XYCP .72711 .33112

XZCP .04018 .04439

ALPHAC 1.998 4.430 GRADIENT

02 44.854 44.891

-5.00/

GRADIENT INTERVAL

RUN NO. 146/ 0 RN/L = 3.30

DATE 22 MAR 76

SREF LREF BREF SCALE

5.000

CA23B
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DATA
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08 OCT 75)		жнин 0.000 0.000 0.000 0.000 0.000		CPS2 . 25191 . 24738 . 00190	08 001 75)		5.000 5.000 10.000		CPS2 -,23264 -,24471 -,00618		CPS2 . 23801 . 24554 . 00311		CPS2 .24751 .25030 .00115		CPS2 25009 25002
(ENH014) (0	ARAMETRIC DATA	.000 STAB .000 ELEVON 6.000 DX .000 MACH		CPS1 18524 18689 00069	(ENH015) (0	PARAMETRIC DATA	.000 STAB .000 ELEVON 8.000 DX .000 MACH		CPS1 17769 19888 01086		CPS1 18262 19398 00468		CPS1 19618 19691 00030		CPS1200211976200106
	PAR	BETA ** RUDDER ** 10RB ** DY **	5.00	CPE3 20907 20336 .00240		PAR	TA DOER ::	5.00	CPE3 -,15955 -,16309 -,00182	5.00	CPE3 14406 15055 00268	5.00	CPE3 15264 13673 .00658	5.00	CPE3 13317 12713 .00247
P DATA)		8 P. C	-5.00/	CPB3 27065 26656	DATA		88 0.0	-5.00/	CPB3 25268 25881 00314	-5.00/	CPB3 24832 26129 00534	-5.00/	CPB3 26525 26439 .00035	-5.00/	CPB3 2754 27244 00037
O2S! (ORBITER			INTERVAL	CPB2 28457 28222 .00099	OZSI (ORBITER			INTERVAL =	CPB2 26594 27291 00357	INTERVAL =	CPB2 26244 +.27947 00702	INTERVAL =	CPB2 27707 28282 00238	INTERVAL =	CPB2 -,28254 -,28810 -,00228
747/1 AT1 0			GRADIENT	CPB1 25405 24792 .00257	747/1 AT1 06			GRADIENT	CPB1 23183 23928 00382	GRAD I ENT	CPB1 22823 24636 30747	GRAD I ENT	CP81 24590 24542 00020	GRADIENT	CP81 25358 25191 .00068
-120(CA23B)		N. X0 N. X0 N. X0	ال = 3.30	CPC 05984 06725 .00109	-120 (CA23B)		000 X X X V X X	'L = 3.30	CPC 05261 06359 00562	L = 3.29	CPC 05175 06914 00717	1. 3.29	CPC 07202 06735 .00193	L = 3.29	CPC 07606 07122
ARC 14-1		0000. 0000. 375.0000	147/ 0 RN/L	XYCP -4.97051 .35938 2.23755	ARC 14-18		.0000 .0000 375.0000	51/ 0 RN/L	XYCP .23611 .00176 12008	152/ 0 RN/L	XYCP . 22087 02485 10131	53/ 0 RN/L	XYCP .17976 08111	54/ 0 RN/L	XYCP .12344 08316 08452
)ATA	XMRP YMRP ZMRP	RUN NO. 1	XZCP . 04035 . 04400 . 00153		ATA	XMRP YMRP # ZMRP #	RUN NO. 1	XZCP .05123 .05223	RUN NO. 1	XZCP .04882 .04971 .00037	RUN NO. 1	XZCP .04602 .04652	RUN NO. 15	XZCP .04117 .04092000010
	REFERENCE DATA	2690.0000 SO.FT. 474.8100 IN. 936.6800 IN.		ALPHAC 2.049 4.431 GRADIENT		REFERENCE DATA	0000 SQ.FT. 8100 IN. 6800 IN. 0125		ALPHAC 2.410 4.362 GRADIENT		ALPHAC 2.043 4.469 GRADIENT		ALPHAC 2.079 4.497 GRADIENT		AL PHAC 2.049 4.493 GRADIENT
		SREF = 2690.0000 LREF = 474.8100 BREF = 936.6800 SCALE = .0125		02 50.387 50.182			SREF = 2690.0000 LREF = 474.8100 BREF = 936.6800 SCALE = .0125		02 7.261 7.540		02 9.896 10.215		02 14.806 14.750		D2 30.131 30.087

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TABULATED SCURCE DATA - CA23B

CRADIENT 00043	DATE 22 MAR 76 REFER SREF = 2690.0000 LREF = 474.8100 BREF = 936.6800 SCALE = 0.0125 DZ AL	ENCE SO. F. IN. PHAC	TABULATED SCURCE DATA T. XMRP = 1109.00 YMRP = 375.00 ZMRP = 375.00 XZCP	APC 14-120 APC 14-120 1109.0000 1N 375.0000 1N XYCP XYCP CRANCE 155/ 0 RN/L	- CA23B) (CA23B) - X0 - Y0 - Y0 - Z0 - CPC - 06332	O2S	1 (ORBITER DATA) INTERVAL = -5.0 CPB22731429305	BET. RVD1 10R0 DY DY 10°/		(ENH015) PARAMETRIC DAT .000 STA .000 ELE 8.000 DX .000 MAC	5) (08 0C1 7 DATA STAB = 5 ELEVON = 10 DX = 1	5.000 5.000 10.000 .600
Perference Data Perference		GRADIENT ALPHAC 2.016 4.375 GRADIENT	m . m . ± . m . ± . m . ± . m . m . m .	. 05747 . 0 RN . 09035 . 12664 - 09197	00374 = 3.29 CPC 07667 08066 00169	3245 RADIENT RB1 B652 B691 0186 A11 025	- z 0	35 35 38 38	•	CPS1 CPS1 1958 2070 00476	_	7 35 8 8
PETA	_	REFERENCE D	DATA						PAR		ATA	
ALPHAC XZCP XYCP CPC CPB1 CPB2 CPB3 CPE3 CPS1	4 4 11 11	0000 SQ.FT. 8100 IN. 6800 IN. 0125		109. 375.				BET RUD 10R DY	11 H 88 H			5.000 5.000 20.000 .600
ALPHAC XZCP XYCP CPC CPB1 CPB3 CPE3 CPE3 CPE3 CPE3 CPE3 CPE3 CPE3 CPE				0 \	8	GRADIENT		.00				
ALPHAC XZCP XYCP CPC CPB1 CPB2 CPB3 CPE3 CPS1 CPS1 CPS2 CPS3 CPC3 CPS1 CPC3 CPS1 CPC3 CPS1 CPC3 CPS1 CPC3 CPS1 CPC3 CPS1 CPC3 CPC3 CPS1 CPC3 CPC3 CPS1 CPC3 CPC3 CPS1 CPC3 CPC3 CPC3 CPC3 CPC3 CPC3 CPC3 CPC	02 2.997 3.241	ALPHAC 2.461 4.340 GRADIENT	XZCP .04965 .05255		CPC .0494 .0574 .0042	CPB1 -,22882 -,23700 -,00436	CPB2 26918 27398 00522	CPB3 26187 26381 00104	CPE3 12749 13245 00264	CPS1 1824 1896 0037		51 81 76
ALPHAC XZCP XYCP CPC CPB1 CPB2 CPB3 CPE3 CPS1 CPS1 C. 26.024 .04095 .35777 -066892478928382260821532319346 4.482 .04484 .26349060102391227601260821384918550 .00283 GRADIENT .0015803835 .00276 .00357 .00318 .00347 .00500 .00283 .00283				0 \	3.5	GRADIENT		ν.	٥.			
ALPHAC XZCP XYCP CPC CPB1 CPB2 CPB3 CPE3 CPS1 1.989 .03841 .37909051232344727452258551389217925 +.485 .04303 .2457658182375927668264461423218358 GRADIENT .00184053050027800086000850013600173	DZ 7.114 7.110	ALPHAC 2.024 4.482 GRADIENT	XZCP . 04095 . 04484	XVCP .35777 .26349 03835	CPC 06689 06010		CPB2 -,28382 -,27601	89. 89. 00.	CPE3 -, 15323 -, 13849 , 00600	CPS1 1934 1865		84 75 10
ALPHAC XZCP XYCP CPC CPB1 CPB2 CPB3 CPE3 CPS1 1.989 .03841 .379090512323447274522585513892179251889 .04300 .24657658182375927668264461423218358 GRADIENT .601846535502780012500086002370013600173				3/ 0	l = 3.	GRADIENT	INTERVAL	ΐν				
	02 10.110 9.502	AL PHAC 1.989 4.485 GRAD1ENT	x2CP .03841 .043CD	XYCP .37909 .24557 65305	CPC 05123 05818 0278	CPB1 23447 23759 00125	CPB2 27452 27668 00086	CPB3 25855 26446 00237	CPE3 13892 14232 00136			50 38 15

PAGE 260	(08 OCT 75)
	(ENH016)
	(ORBITER DATA)
	747/1 ATI 02SI (ORBITER DATA)
ABOLATED SUCHCE DATA - CARSE	ARC 14-120(CA23B)

	5.000 N = 5.000 1.000 1.000		CPS2 24401 24672 00127		CPS2 24112 24350 00098		CPS2 25060 24713 .00142		CPS2 24840 25172 00133
PARAMETRIC DATA	.000 STAB .000 ELEVON 6.000 DX .000 MACH		CPS1 19741 19032		CPS1 18409 18880		CPS1 18848 19025 00073		CPS1 18078 18789
PAR	BETA = RUDDER = 10AB = 6	5.00	CPE3 15778 14911	5.00	CPE3 15303 14819	5.00	CPE3 15903 15017 .00363	5.00	CPE3 15715 15395
	98 07 07	-5.00/	CP83 27132 26923 .00097	-5.00/	CPB3 26548 26624 00031	-5.00/	CPB3 26988 26473	-5.00/	CPB3 26524 26883 00144
		GRADIENT INTERVAL =	CPB2 28471 27899 .00266	GRADIENT INTERVAL .	CPB2 27833 27978 00059	GRADIENT INTERVAL =	CPB2 28273 27692	INTERVAL =	CP82 27529 28159 00253
		GRADIENT	CPB1 25124 24347 .00361	GRADIENT	CPB1 24353 24160	GRADIENT	CP81 25301 24036 .00519	GRADIENT	CP81 24270 24928 00264
	N. XO IN. YO	RN/L = 3.30	CPC 07049 06505 .00253	'L = 3.31	CPC 06254 06019 .00096	L = 3.30	CPC 07121 06431 .00283	L = 3.30	CPC 06048 06513 00187
	1109,0000 .6000 375,0000	1647 0 RN	XYCP .34695 .20645 06539	165/ 0 RN/L	XYCP . 32948 . 22143 - 04435	166/ 0 RN/L	XYCP .40757 .15458 10373	167/ 0 RN/L	XYCP .42657 .12951 11904
ATA	XMRP YMRP ZMRP REP	RUN NO.	XZCP .03724 .04142 .00195	RUN NO.	XZCP .03606 .04091	RUN NO.	XZCP .03593 .04045	RUN NO.	XZCP .03557 .04000 .00178
REFERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		ALPHAC 2.147 4.296 GRADIENT		ALPHAC 2.005 4.442 GRADIENT		AL PHAC 2.001 4.440 GRACIENT		ALPHAC 1.983 4.478 GRADIENT
	SREF = 2690. LREF = 474. BREF = 936. SCALE = 936.		02 14.885 14.669		02 29.970 29.738		02 44.740 44.620		DZ 50.218 50.509

ED SOURCE DATA - CA23B ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (ENH017) (08 OCT 75)	PARAMETRIC DATA	= 1109.0000 IN. XO BETA = .000 STAB = 5.000 = .0000 IN. YO RUDDER = .000 ELEVON = 5.000 10RB = 8.000 DX = 20.000 DY = .000 MACH = .600	171/ D RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00	XYCP CPC CP81 CP82 CP83 CP51 CP5224188241882418824189246011950624188201823246012450124601246032710121394201992497300577003080071700537003370028400328	172/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00	XYCP CPC CPB1 CPB3 CPE3 CPS1 CPS2 1 5163 06998 24998 28930 26638 20725 20136 24926 5 04056 07035 24954 28852 27011 20488 20434 24819 7 08082 00016 00192 00346 00157 .00100 00125 .00045	173/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00	xYCP CPC CPB1 CPB3 CPE3 CPS1 CPS2 3 .11914 07471 25462 29018 27333 20864 21238 25703 7 05068 08023 29991 27760 20702 25416 + 07233 00235 00202 00182 .00182 .00182	174/ 0 RN/L = 3.32 GRADIENT INTERVAL = ~5.00/ 5.00	XYCP CPC CPB1 CPB2 CPB3 CPE3 CPS1 CPS2 3 .11374 07403 25704 29129 28005 21075 20487 25972 3 06613 07443 26007 29768 28226 20838 21054 25763 3 07487 00126 00256 00092 .00099 00236 .00087	175/ D RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00	XYCP CPC CPB3 CPB3 CPE3 CPS1 CPS2 1 .03714 06373 24997 28908 26943 2043 24997 0 08333 07590 26259 29755 27939 20867 25017 8 05220 00527 00410 00431 00166 00260 00312	176/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00	XYCP CPC CPB1 CPB2 CPB3 CPE3 CPS1 CPS2 4 .0784106847247662817727013200831986725334
, 5	⋖	1109.0000 IN. .0000 IN. 375.0000 IN.	1/ 0 RN/L	XYCP .16299 .01823	/ 0 RN/L	XYCP .15163 .04056	73/ 0 RN/L	XYCP .11914 .05068	/ 0 RN/L	XYCP .11374 .06613	1 0 RN/L	XYCP .037!4 .08333	O RN/L	
DATE 22 MAR 76	REFERENCE DAT	SREF = 2690.0000 SQ.FT. LREF = 474.8100 IN. BREF = 936.6800 IN. SCALE = .0125		DZ ALPHAC 7.409 2.320 7.682 4.409 GRADIENT		DZ ALPHAC 10.200 1.989 9.876 4.367 GRADIENT		DZ ALPHAC 14.980 2.042 14.840 4.390 GRADIENT		DZ ALPHAC 30.168 1.994 29.810 4.397 GRADIENT		DZ ALPHAC 44.854 2.109 45.244 4.417 GRADIENT		DZ ALPHAC

DRIGINAL PATTE OF POOR OTHER

(08 OCT 75)

(ENH018)

DATA)
ORBITER
0251
ATI
11/11
14-120(CA23B)
ARC

	000.00.		CPS2 24952 25265 00162		CPS2 25857 26400 00229		CPS2 25828 26074 00:00		CPS2 26379 26241 .00061		CPS2 26238 25482 .00338		CPS2 25491 25693 00087
PARAMETRIC DATA	.000 STAB .000 ELEVON 6.000 DX 0.000 MACH		CPS1 19024 19490 00241	ŧ	CPS1 20350 20071 .00118		CPS1 20064 20061 .00001		CPS1 20764 20414 .00155		CPS1 20745 20002 .00332		CPS1 19807 20428 00266
PARA	TA # DDER # RB # 1	5.00	CPE3 18726 18519	5.00	CPE3 20163 19582 .00245	5.00	CPE3 19797 19117 .00275	5.00	CPE3 19882 18877 .00444	5.00	CPE3 19785 19138	5.00	CPE3 18941 18592
	8 8 0.0 ∨0	-5.03/	CPB3 26441 26588 00076	-5.00/	CPB3 27675 27568 00045	× -5.00/	CPB3272162718000014	-5.00/	CP83 28250 27319	-5.00/	CPB3 - 28337 - 27615	-5.00/	CPB3 27304 26981
		GRADIENT INTERVAL	CPB2 27253 27937 00354	T INTERVAL	CPB2 28825 28627 .00083	T INTERVAL	CPB2 28443 28771 00133	I INTERVAL	CPB2 29587 28398 .00526	I INTERVAL	CPB2 28957 28857	INTERVAL	CPB2 28522 28177 .00148
		GRADIEN	CPB1 24736 24807 00037	GRADIENT	CPB1 25456 25422 .00014	GRADIENT	CPB1 25641 25077 .00229	GRADIENT	CPB1 -,26004 -,25431 .00253	GRADIENT	CPB1 25998 25617 .00170	GRADIENT	CPB1 25112 24991
	1N. 20 1N. 20 1N.	RN/L = 3.32	CPC 06464 06726 00135	RN/L = 3.31	CPC 07757 07549 .00088	RN/L = 3.31	CPC 07815 07170	/L = 3.33	CPC 07556 07386	1 = 3.33	CPC 07440 07015	1 = 3.35	CPC 06436 06632 00084
	1109.0000 .0000 375.0000	181 0 RN	XYCP 13422 67489 27958	182/ 0 RN	XYCP 05651 51759 19035	183/ 0 RN	XYCP .02737 66327	1847 0 RN/L	XYCP . 09579 36029 20173	185/ 0 RN/L	XYCP .25636 03519 13046	186/ 0 RN/L	XYCP . 34928 . 05391 +.12644
DATA	XMRP YMRP ZMRP	RUN NO.	XZCP .07096 .07803 .00366	RUN NO.	XZCP .05000 .06815 .00344	RUN NO.	XZCP .05788 .06498	RUN NO.	XZCP .05474 .06146 .00297	RUN NO.	XZCP .04723 .05249 .00235	RUN NO.	XZCP .04246 .04737 .00210
REFERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		ALPHAC 2.472 4.405 GRADIENT		ALPHAC 2.009 4.378 GRADIENT		ALPHAC 2.005 4.475 GRADIENT		ALPHAC 2.102 4.362 GRADIENT		ALPHAC 2.100 4.335 GRACIENT		ALPHAC 1.972 4.308 GRADIENT
	SREF = 2690.0000 LREF = 474.8100 BREF = 936.6800 SCALE = .0125		02 3.378 3.590		02 7.711 7.202		D2 9.911 10.102		02 14.973 14.736		DZ 29.716 29.761		DZ 44.733 44.856

- CA238 O(CA23B) 747/1 AT1 O2S1 (ORBITER N. XO N. YO N. YO N. YO CPE CPB1 CPB2001592575929069001562539129007001512920700151292070015129207001512920700151292070015129207001512920700151292070015129207001512920700151292070045524878276920045524878276920078529328007452538629328007452538629328007452538629328007632538629328007572560029328007572560029328007572560029328007572560029328007572560029328007572560029328007572560029328007572560029328007572560029328007572560029328007572560029328007582691029089076882651029089076882651029089076882656129085	- CA238 O(CA238) 747/1 AT1 O2S1 (ORBITER N. XO N. YO N. YO N. YO N. YO N. YO	TABULATED SOURCE DATA	ARC 14-16	DATA	XMRP = 1109.0000 YMRP = .0000 ZMRP = 375.0000	RUN NO. 187/ 0 RN.	XZCP XYCP .04088 .34071 .0283' .0050613154	ARC 14-1	DATA	. XMRP = 1109.0000 YMRP = .0000 ZMRP = 375.0000	RUN NO. 1917 0 RN	XZCP XYCP .0570623786 .0578264083 .0003820402	RUN NO. 1927 D RN	XZCP XYCP .0539715091 .0555745810 .0007314004	RUN NO. 193/ D RN	XZCP XYCP .0503005855 .0519927326 .0006908764	RUN NO. 1947 0 RM	XZCP XYCP .04498 .01737 .0447629380 0000913309
- CA238 O(CA23B) 747/1 AT1 O2S1 (ORBITER N. XO N. YO N. YO N. YO CPB1067942575929069001512900700152201592005800151290070015129007001512900700152248782769200455248782769200455248782847800455248782769200455248782769200455286782847800789291370078925386284350074452538628435007892538628137074452560029328007832560029328007632560029328007572560029328007572560029328007572560029328007572560029328007572560029328007572560029328007582650029328007582650029328007582650029328007582650029389007682650129989007682650129955006882656129955006882656129955	PARA N. XO L = 3.32 GRADIENT INTERVAL = -5.00 / 5.00 CPC CPC CPS CPS CPS CPS CPB CPC CPC CPB CPC CPC	22 MAR 76 TABULATED SOURCE DATA	<u> </u>	REFERENCE DATA	= 1109.0000 i = .0000 i = 375.0000 i	. 187.	'		REFERENCE DATA	1109.0000 - 00000 - 375.0000	0 /161 .	^iiii	. 1927 0	75 7. 7. 7. 7. 7. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	. 193/ 0	, , ,	. 1947 0	XZCP . 04498 . 04476 . 00009
	BETA = 6 PARAI RUDDER = 10 10RB = 10 11519057 11519057 12619573 130 CPE3 131 CPE3 33410167 00/ 5.00	1	0251		<u> </u>	= 3.32 GRADIENT INTERVAL	CPB1 CPB2 2575929069 2539129207 .0015500058	ATI 02SI (ORBITER		zzz	3.32 GRADIENT INTERVAL	CPC CPB1 CPB2 .064552487827692 .070852569328478 .003190041200398	3.32 GRADIENT INTERVAL	CPC CPB1 CPB2 .080762587229137 .074452516628435 .00288 .00322 .00320	3.32 GRADIENT INTERVAL	CPC (PB1 0768325386 0755725600 .0005200088	3.32 GRADIENT INTERVAL	CPC CPB1076032581007688265610003600314

(ENH019) (08 OCT 75)

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14-120(CA23B)
ARC 11

	5.000 5.000 .000 .600					75)		5.000 .000 .600					
	11 10 H H		CPS2 25394 26299		CPS2 24317 26241 00829	21 OCT		12 11 11 16		CPS2 21875 24288 23314 00352		CPS2 22846 23709 24126	
PARAMETRIC DATA	.000 STAB .000 ELEVON 3.000 DX 0.000 MACH		CPS1 21524 21955 00182		CPS1 -,20047 -,21008 -,00414	(ENH020)	PARAMETRIC DATA	.000 STAB .000 ELEVON .000 DX .000 MACH		CPS1 17205 19161 19479		CPS1 -,17204 -,18064 -,19097	
PAR	BETA = RUDDER = 8	5.00	CPE3 18535 18598 00027	5.00	CPE3 17750 18283 00230		PARA	# # # # # # # # # # # # # # # # # # #	5.00	CPE3 18878 20038 18750 .00024	5.00	CPE3 19878 19253 19286 00094	
	8 200-70	-5.00/	CPB3 27876 29336 00617	-5.00/	CPB3 -,26830 -,28641 -,00780	R DATA)		BETA RUDOI 10RB DY	-5.00/	CP83 25653 26785 25367	-5.00/	CPB3 25923 25004 25721	
		GRADIENT INTERVAL	CPB2 29318 31148 00774	I INTERVAL	CPB2 28398 30125 00744	SSI (ORBITE			GRADIENT INTERVAL	CPB2 26895 26636 00053	INTERVAL	CPB2 27678 26787 26667 00231	
		GRADIEN	CPB1 26248 27285 00438	GRADIENT	CPB1 25046 26322 00549	747/1 ATI 02SI (ORBITER DATA)			GRADIEN	CPB1 22954 24740 23260 00082	GRADIENT	CPB1 23656 23115 24072	
	IN. X0 IN. Y0 IN. Z0	RN/L = 3.34	CPC 07806 08899 00462	RN/L = 3.34	CPC 06750 07574 00355	RC 14-120(CA23B) 7		1N. X0 1N. X0 1N. X0	RN/L = 3.32	CPC 03439 06544 05138 00417	RN/L = 3.32	CPC 03357 04939 06147 00616	
	1109.0000 .0000 375.0000	195/ 0 RN	XYCP .02346 07631	196/ 0 RN	XYCP .05374 16453 09401	ARC 14-1		1109.0000 .0000 375.0000	0 / 0 RN	XYCP .26105 .24623 .23566	0/0 RN	XYCP .29853 .24864 .20830 01989	
DATA	XMRP # ZMRP #	RUN NO.	XZCP .04190 .04077 00048	RUN NO.	XZCP .04085 .03947 00059		DATA	XMRP YMRP	RUN NO.	XZCP .39863 .29254 .24754 03612	RUN NO.	xZCP .35614 .26945 .23535 02714	
REFERENCE DAT	2690.0000 SO.FT 474.8100 IN. 936.6600 IN.		ALPHAC 2.014 4.380 GRADIENT		AL PHAC 2.002 4.323 GRADIENT		REFERENCE DATA	9690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		ALPHAC .056 2.231 4.258 GRADIENT		ALPHAC 232 2 .422 4 .286 GRAD LENT	
	# # # # til		02 124.44 15.079		02 50.290 50.279			ни и и		02 2.999 2.972 3.376		02 7.356 7.176	
	SREF LREF BREF SCALE							SREF LREF BREF SCALE					

ORIGINAL PAGE IS OF POOR CHALLEY

TABULATED SOURCE DATA - CA23B

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

•		2020											
08 OCT 75		0000.		CPS2 22513 23573 25713		CPS2 22057 23109 23905 00412		CPS2 23688 24479 25057		CPS2 23537 23588 24042		CPS2 23763 23661 24832 00219	
(ENH021) (PARAMETRIC DATA	.000 STAB .000 ELEVON .000 DX .000 MACH		CPS1 17465 18570 20595 00749		CPS1 18064 18991 19413 00304		CPS1 -, 18998 -, 20247 -, 00274		CPS1 18959 18699 19447 00100		CPS1 18010 18740 20030 00435	
	PARA	BETA :RUDDER : 4 LORB : 4 DY : 1	5.00	CPE3 21792 21700 23140 00323	5.00	CPE3 21897 22333 21659	5.00	CPE3 23291 22918 22995	5.00	CPE3 22161 22065 22573 00086	5.00	CPE3 22755 22243 23089	
DATAI		BET. 10R0	-5.00/	CPB3 25425 25313 26455 00247	-5.00/	CPB3 26346 25970 24921	-5.00/	CPB3 27160 25670 26009	-5.00/	CPB3 26474 25832 25350	-5.00/	CPB3 26652 25559 26254	
SI (ORBITER DATA			INTERVAL =	CPB2 27188 26517 27569 00092	INTERVAL =	CPB2 27311 27120 26311	INTERVAL -	CP82 - 28352 - 26835 - 27065	INTERVAL =	CP82 -,27956 -,27195 -,26686	INTERVAL =	CP82 28296 27191 27595	
747/1 ATI 02SI			GRADIENT INTERVAL	CPB1 23315 24387 00257	GRADIENT	CPB1 23371 24072 24065 00161	GRAD LENT	CPB1 24854 24162 24687 .00047	GRADIENT	CPB1 24013 24122 23454	GRAD I ENT	CPB1 64849 24142 24349	
ARC 14-120(CA23B) 7		N. X0 N. X0 IN. X0	'L ≈ 3.34	CPC 03869 05057 06938 00734	1 = 3.33	CPC 04127 05513 05831	L = 3.33	CPC 05351 06193 06689	L = 3.32	CPC 05092 05233 05692	L = 3.33	CPC 05021 05262 06133	
ARC 14-18		375.0000	211/ 0 RN/L	XYCP .25224 .25748 .21353 00926	212/ 0 FN/L	XYCP .24630 .24770 .21351	213/ 0 RN/L	XYCP .25118 .26065 .20391 00943	214/ 0 RN/L	XYCP .24131 .25639 .20783	215/ 0 RN/L	XYCP . 29584 . 26577 . 22420 01553	
	DATA	XMRP YMRP ZMRP	RUN NO. 2	xZCP .41452 .30802 .25796	RUN NO. 2	XZCP .37046 .28484 .24296 02871	RUN NO. 2	XZCP .37602 .26796 .23410 03094	RUN NO. 2	x2CP .33433 .25309 .22292 02535	RUN NO. 2	xzcP .31380 .22515 .20165 02525	
	REFERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		ALPHAC .173 2.255 4.353 GRADIENT		ALPHAC 126 2.399 4.355 GRADIENT		ALPHAC 253 2.398 4.413 GRADIENT		ALPHAC 052 2.452 4.403 GRADIENT		ALPHAC +.137 2.487 4.402 GRADIENT	
		SREF = 2690. LREF = 474. BREF = 936. SCALE =		3.110 3.078 3.099		02 7.673 7.105 7.181		DZ 9.888 10.133 9.989		02 14.808 14.795 14.946		02 29.743 29.755 29.747	

CA23B A23B 747/1 AT1 0251 (ORBITER DATA) (ENHO21) (08 OCT 75)	PARAMETRIC DATA	BETA = .000 STAB = -1.000 RUDDER = .000 ELEVON = .000 10RB = 4.000 DX = .000 DY = .000 MACH = .600	.33 GRADIENT INTERVAL = -5.00/ 5.00	CP81 CP83 CPE3 CPS1 CPS2 4249562872327344229401718424054 1244332751626041229051799824352 92391226725254121855323697 5 .00233 .00451 .00440 .0011100309 .00065	747/1 AT1 0251 (ORBITER DATA) (ENHO22) (D8 OCT 75)	PARAMETRIC DATA	BETA = .000 STAB = 5.000 RUDDER = .000 ELEVON = .000 10RB = 8.000 DX = .000 DY = .000 MACH = .600	.31 GRADIENT INTERVAL = -5.00/ 5.00	CPB1 CPB2 CPB3 CPE3 CPS1 CPS2 2215902398523013236611677622203 0224752564124450263991811723016 9230902671725255216281867824010 13003340065300537 .004570045600430	.31 GRADIENT INTERVAL = -5.00/ 5.00	CPB: CPB2 CPB3 CPE3 CPS1 CPS2 6225892507423939186981707822048 9226222561824484191951857423557 54234742671225417197781926523555 0001890035100327002410050000356	3.31 GRADIENT INTERVAL = -5.00/ 5.00	CPB2
		BE. RUE 10F	u				88 9.0 9.0 9.0	ار 15		AL = -5.	282 25074 25618 26712	ا د اح	CPB2 CPB3 2574524863 2757526557 2716725542 0032900173
1000			GRADIENT		4T1			1 GRADIENT		1 GRADIENT	CP8: .22589 .22622 .23474 .00189	1 GRADIENT	CPB1 22777 23964 23863
1953401031-F1 0V4		.0000 IN. YO .0000 IN. YO .0000 IN. ZO	RN/L = 3.3	(YCP CPC .423605274 .3165505451 .3463205559 .0206100065	14- 12 0(CA23B		.0000 IN. XO .0000 IN. YO .0000 IN. ZO	RN/L = 3.3	XYCP CPC -2110504032 -1219805100 -0883505929 -0708900453	RN/L = 3.	XYCP CPC .1975404516 .0905505619 .0944305854	RN/L = 3.	2672 - 05553 07262 - 06910 0730 - 06014 05239 - 00120
	4 T A	XMRP = 1109. YMRP = 375.	RUN NO. 216/ 0	XZCP XYCP .30130 .423 .20540 .3166 .18855 .3466 02630020	ARC	7.A	XMRP = 1109 YMRP = 375	RUN NO. 221/ 0	X2CP XYCP .18036 .2118 .16764 .1218 .14944088	RUN NO. 222/ 0	x2CP x7: 17224 .1 .16279 .0 .144980	RUN NO. 223/ 0	XZCP XYI .17025 .7 .15889 .0 .146710
	REFERENCE DATA	2590.0000 SQ.FT. 474.8100 IN. 936.6800 IN. .0125	_	ALPHAC - 114 2.547 4.315 GRADIENT		REFERENCE DAT	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN. .0125		AL PHAC 180 2.374 4.374 GRADIENT		AL PHAC 095 462 4.329 GRADIENT		ALPHAC !31 2.479 4.467 GRADIENI
		SREF = 2690. LREF = 474. BREF = 936. SCALE = .		70 669.44 609.44			SREF = 2690. LREF = 474. BREF = 936. SCALE =		02 7.175 7.048 7.827		02 10.008 9.794 10.169		02 14.875 15.107 14.650

75)		5.000 .000 .000 .600							(5/		5.000 .000 .000		
08 OCT		H H H H		CPS2 23512 24246 24281		CPS2 23657 23913 23284 .00071		CPS2 23038 23949 24581	08 OCT		31 H 41 H		CPS2 22184 23563 23172 00246
(ENHOZZ)	PARAMETRIC DATA	000 STAB 000 ELEVON 000 DX		CPS1 18146 18391 19951 00379		CPS1 17676 18963 18880 00290		CPS1 17910 18512 19892 00424	(ENH023) (PARAMETRIC DATA	.000 STAB .000 ELEVON 6.000 DX .000 MACH		CPS1 16760 17864 18525 00411
	PARA	BETA * RUDDER = 8 1088 = 8 DY	5:00	CPE3 18757 19443 19844	5.00	CPE3 18215 19313 19121	5.00	CPE3 18530 19784 00268		PARA	и в и и	5.00	CPE3 16301 17054 16850 00136
R DATA		8 507	= -5.00/	CPB3 24282 25460 26648 00520	-5.00/	CPB3 23980 25338 25996	-5.007	CPB3 24495 25329 26548 00444	R DATA)		BETA RUDDE I ORB DY	-5.00/	CPB3 -,23804 -,24373 -,24739 -,00218
251 (ORBITER DATA)			T INTERVAL	CPB2 25328 25458 27670 00280	INTERVAL	CPB2 25058 26710 27366 00533	INTERVAL	CPB2 25872 26629 27491	0251 (ORBITER			INTERVAL	CPB2 25396 25292 25928
747/1 AT1 0251			GRADIENT	CPB1 23379 24111 24766 00306	GRADIENT	CP81 -,25687 -,23509 -,23982 -,00296	GRADIENT	CPB1 22660 23923 24688	747/1 AT! 06			GRADIENT	CPB1 22103 22321 22686 00133
14-120(CA23B)		. XO . XO . XO . XO	RN/L = 3.31	CPC 05583 06088 06557	1 = 3.31	CPC 04637 05407 06097 00329	/1 = 3.30	CPC 04415 06230 06660 00502	14-120 (CA23B)		IN. X0 IN. Y0 IN. Z0	1 = 3.31	CPC 04239 05171 05232
ARC 14-1		1109.0000 .0000 375.0000	224/ 0 RN	XYCP . 20057 . 04527 - 08563	225/ 0 FN/L	XYCP . 23099 . 04319 09100	226/ 0 RN/L	XYCP . 26417 . 05436 05109	ARC 14-13		375.0000	231/ 0 RN/L	XYCP . 24228 . 20479 . 14862 02138
	DATA	XMRP = YMRP = ZMRP	RUN NO. 2	XZCP .16450 .14917 .12891	RUN NO. 2	XZCP .16064 .14318 .12214 00860	RUN NO. 2	x2CP . 15944 . 14255 . 11898 00875)ATA	XMRP YMRP 2MRP	RUN NO. 2	XZCP . 22436 . 21351 . 20391 00472
	REFERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		ALPHAC 130 2.540 4.360 GRAD [ENT		ALPHAC 097 2.520 4.300 GRADIENT		AL PHAC 122 2 . 456 4 . 443 GRAD IENT		REFERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		ALPHAC . 028 2.478 4.342 GRADIENT
		SREF = 2690. LREF = 474. BREF = 936. SCALE =		DZ 29.663 30.014 30.212		DZ 44.608 44.758 44.921		02 50.329 50.199 50.308			SREF = 2690. LREF = 474. BREF = 936. SCALE =		02 3.150 3.398 3.235

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TABULATED SOURCE DATA - CA23B

5.000 .000 .000 .000 75 CPS2 ..22528 ..23107 ..23579 CPS2 . 23103 . 24192 . 24526 . 00320 .23187 .23219 .23826 .00135 -.24196 -.23574 -.23552 -.00145 -.24147 .23825 PAGE 1 08 OCT STAB ELEVON DX MACH PARAMETRIC DATA CPS1 -.17336 -.17294 -.18425 -.00236 CPS1 -.17552 -.17684 -.18889 CPS1 -.17488 -.18434 -.19053 -.17093 -.18867 -.18700 -.00373 CPS1 -.17863 -.18730 -.18993 -.00250 (ENH023) CPE3 -.16714 -.16137 -.16482 .00059 CPE3 -.17234 -.16415 -.17270 CPE3 - 16894 - 17661 - 17327 - 00105 CPE3 -.16552 -.17534 -.17190 -.00153 CPE3 -.17168 -.17373 -.16862 5.00 5.00 5.00 5.00 5.00 BETA RUDDER 1 10RB 1 CPB3 -.24588 -.25211 -.24578 CPB3 -.24912 -.25659 -.25469 -.00131 CPB3 -.25476 -.24534 -.25630 CP83 -.24808 -.24137 -.25445 -.00120 -.25532 -.25464 -.24766 .00160 -5.00/ -5.00/ -5.00/ -5.00/ -5.00/ 747/1 AT1 0251 (ORBITER DATA) CPB2 -.26774 -.25476 -.26655 INTERVAL INTERVAL CPB2 -.26397 -.27178 -.26386 -.00012 CPB2 -.26734 -.25970 -.25953 CPB2 -.25643 -.26677 -.25872 -.00068 GRADIENT INTERVAL CPB2 -.26111 -.25757 -.26390 GRADIENT INTERVAL GRADIENT INTERVAL GRADIENT GRADIENT CPB1 -.23042 -.22569 -.23390 -.00069 -.23046 -.23265 -.23284 -.00055 CPB1 -.23107 -.22895 -.23125 CPB1 -.22941 -.23739 -.23528 CPB1 -.23474 -.23282 -.23013 3.31 3.31 RN/L = 3.31 RN/L = 3.31 3.31 CPC -.044**22** -.05904 -.05842 -.00326 CPC -.04167 -.04321 -.05824 -.00363 CPC -.04662 -.05236 -.05533 -.04458 -.06178 -.05704 -.00296 -.05964 ARC 14-120(CA23B) FN/L = RN/L × RN/L = 375.0000 IN. XYCP .31682 .21749 .04730 XYCP .25571 .18845 .12368 XYCP .29006 .21383 .07192 XYCP .27704 .17268 .12421 XYCP .24586 .20969 .11642 236/ 0 235/ 0 233/ 0 234/ 0 232/ 0 xZCP .19098 .18344 .16734 -.00512 xZCP .18657 .17470 .15695 -.00662 XZCP .21035 .20535 .19451 XZCP .20130 .19587 .18386 -.00379 XZCP .20594 .20118 .18993 -.00348 RUN NO. JON NO. PEN NO. PUN NO. PUN NO. XMRP YMRP ZMRP REFERENCE DATA 2890.0000 SQ.FT. 474.8100 IN. 936.6800 IN. ALPHAC -.083 2.454 4.441 GRADIENT ALPHAC -.030 2.408 4.398 GRADIENT ALPHAC -.060 2.510 4.425 GRADIENT ALPHAC -.157 -.438 4.444 GRADIENT ALPHAC -.079 2.449 4.418 GRADIENT 6 02 44.538 44.541 44.965 DZ 29.767 29.743 29.929 02 9.588 9.981 9.714 DZ 14.480 14.703 14.839 02 7.044 7.210 7.208 SREF LREF BREF SCALE

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ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

(ENH023) (08 OCT 75)

	5.000 .000 .000 .600		78 29 73	(5/ 1		-1.000 .000 .000 .600		88 33 83 4 33		34.6 70 70 70		55 55 55
PARAMETRIC DATA	* * * * * * * * * * * * * * * * * * *		CPS2 23978 23829 24841	(21 OCT				CPS2 22133 22684 22930		CPS2 22426 22374 23270		CPS2 23811 22655 23621
	STAB ELEVON DX MACH		PS1 18428 17660 18907 00079	(ENHOS4)	IC DATA	STAB ELEVON DX MACH		CPS1 17864 17857 18756		CPS1 17384 18032 18743		CPS1 18379 18696 18770 00091
				HZ.	PARAMETRIC	.000 .000 6.000						
ď	BETA RUDDER RUDDER RUDDER BUDDER BUDDER BUDDER BUDDY B	5.00	CPE3 17361 16475 17124		PA	BETA RUDDER BIORB ROOF BIORB ROOF	5.00	CPE3 16541 16347 15713	5.00	ri u	5.00	CPE3 17767 16245 16803 .00240
	88. 100	-5.00/	CPB3 26246 25068 25879	R DATA)		36 2 0 6.	* -5.00/	CPB3 24726 23817 24088	-5.00/	CPB3 24368 23480 24240	-5.00/	CP83 24822 24295 0138
		INTERVAL	CPB2 27259 25715 27662 00043	O2S1 (ORBITER			INTERVAL	CPB2 25618 24734 25515	INTERVAL	CPB2 25392 24532 25642 00037	INTERVAL	CPB2 25047 25268 25158
		GRADIENT	CPB1 23764 23021 24309 00093	747/1 AT1 08			GRADIENT	CPB1 22835 22360 00011	GRADIENT	CP81 22103 22428 23243 00246	GRADIENT	CPB1 23119 22166 .00211
	N. XO N. XO N. ZO	1 = 3.31	CPC 05060 04999 06427 00278	ARC 14-120(CA238) 7		N N N N N N N N N N N N N N N N N N N	L = 3.30	CPC 04870 04750 05669	L = 3.30	CPC 03794 05058 05888	L = 3.30	CPC 05146 05338 05376 00054
	.0000 .0000 375.0000	37/ 0 RN/L	XYCP .32385 .21996 .07569	ARC 14-16		1109.0001 10000. 375.0000	241/ 0 RN/L	xYCP .23745 .1780 .11533	2/ 0 RN/L	XYCP .23060 .19529 .11872	3/ 0 RN/L	XYCP .27553 .19268 .11468
DATA	XMRP YMRP ZMRP	RUN NO. 23	x2cP .18753 .17216 .15509		ATA	XMRP = ZMRP =	RUN NO. 2	xzcP .23564 .21811 .20563 00703	RUN NO. 24	x2CP .21260 .20794 .19637 00349	RUN NO. 24	XZCP .20747 .20454 .19323
REFERENCE (2690.0000 SO.FT. 474.8100 IN. 936.6800 IN.		ALPHAC 140 2.539 4.426 GRADIENT		REFERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		AL PHAC . 104 2.378 4.382 GRADIENT		ALPHAC 107 2.445 4.433 6RADIENT		ALPHAC 036 2.466 4.354 6RADIENT
			DZ +9.951 +9.970 50.050			2690 # 474 936,		02 2.790 3.147 3.235		02 7.214 7.169 7.223		D2 9.900 9.833 9.797
	SREF LREF BREF SCALE					SREF LREF BREF SCALE						

35 271	ST 75)		-1.000 .000 .000 .600		750 900 920 504		PS2 23374 23329 23825 00096		ინი მეგი 110		52 5749 8877 299
PAGE	(21 OCT		# # # # _8		CPS2 21750 22900 24020		CPS2 23374 23329 23825 00096		CPS2 23604 24616 24053 00110		CPS2 22580 23749 23877
	(ENH024)	RIC DATA	D STAB 0 ELEVON 0 DX 0 MACH		CPS1 16332 18542 19898 00804		CPS1 17972 18211 19218		CPS1 18736 19934 19417 00161		CPS1 17681 18266 18784
	(ENHO2 PARAMETRIC	PARAMET								5.00	
			BETA = RUDDER = 10RB = DY	5.00	CPE3 16629 16955 17474 00185	-5.00/ 5.00	CPE3 18025 17403 17306	5.00	CPE3 19967 19265 17799		CPE318926175641657400523
	DATA)		BETA RUDDE 10RB DY	-5.00/	CPB3 23313 23841 24801 0324		CPB3 25050 24621 25065	-5.007	CPB3 26145 25526 25240	-5.00/	CPB3 24826 24613 24739
	(ORBITER DATA)			INTERVAL "	CPB2 24930 24917 26094 00241	INTERVAL	CPB2 26620 25429 26115	INTERVAL	CPB2 27536 26650 26965	INTERVAL	CPB2 26450 25883 26464
	747/1 AT1 0251			GRADIENT	CPB1 21858 22496 22996 00255	GRADIENT	2P81 23454 22574 23313	GRAD LENT	CPB1 24299 24027 24027	GRADIENT	CPB1 22498 23014 00120
- CA23B			2,000 2,000	RUN NO. 244/ 0 RN/L = 3.30	CPC 04015 04796 05973 00429	245/ 0 RN/L =	CPC 05094 05147 05829 00157	L = 3.28	CPC 05337 06342 06153	L = 3.28	CPC 03985 05140 05471 00338
SOURCE DATA	ARC 14-120(CA23B)		1 109,0000 11 0000 . 1 0000 . 375.0000 1		XYCP .26196 .19936 .12736		XYCP . 26215 . 17927 . 08177	246/ 0 RN/L	XYCP . 32597 . 17986 . 09304	RUN NO. 247/ 0 RN/L	XYCP . 27787 . 18151 . 08569
TABULATED		ATA	XMRP YMRP ZMRP		XZCP - 20372 - 19826 - 18705 - 00362		x2CP .19163 .18310 .16832 00508	RUN NO. R	XZCP .18776 .17395 .15623 00684		XZCP .18441 .17052 .15453
		REFERENCE DATA	0000 SQ.FT. 8100 IN. 6800 IN. 0125		ALPHAC - 163 - 163 - 499 4 287 GRADIENT		ALPHAC 049 2.432 4.487 GRADIENT		ALPHAC 131 2.390 4.445 GRADIENT		ALPHAC 101 2.534 4.394 GRADIENT
DATE 22 MAR 76			SREF = 2690.0000 LREF = 474.8100 BREF = 936.6800 SCALE = .0125		02 14.827 14.725 14.404		02 29.598 29.897 29.731		70 8-5.44 8-5.745 8-7.44 186.44		77 49. 996 50. 08 50. 05

!	_		0000										
}	(21 OCT 75				CPS2 22981 22855 23029		CPS2 22799 23519 22905		CPS2 21626 22417 23534 00433		CPS2 23101 23898 23574		CPS2 -,22276 -,23138 -,23208 -,00210
	(ENHO25)	PARAMETRIC DATA	.000 STAB .000 ELEVON .000 DX		CPS1 18613 18498 19502		CPS1 18120 19429 18515		CPS1 17174 18058 20182 00664		CPS1 18012 19491 19651 00367		CPS; 17049 18671 19362
		PARA	00 01 02	5.00	CPE3 21676 21128 20767	5.00	CPE3 21709 21421 20966	5.00	CPE3 - 21302 - 21021 - 21965 - 00135	5.00	CPE3 23208 22703 22419	5.00	CPE3 22727 21524 21863 .00201
. !	DATA)		BETA RUDDE 10RB DY	-5.00/	CPB3 23700 24290 24402	-5.00/	CPB3 23677 24183 24494 00182	-5.00/	CPB3 23325 23223 24975 00350	-5.00/	CPB3 24513 25199 25751	-5.00/	CPB3 24505 24160 25547
	UZSI (ORBITER DATA)			INTERVAL =	CPB2 24419 25513 26180	INTERVAL =	CPB2 24873 25218 25894	INTERVAL =	CPB2 24674 24565 26626	INTERVAL =	CPB2 25659 26287 26880 00264	INTERVAL =	CPB2 25619 25829 27188 00336
	/47/1 AT1 06			GRADIENT	CPB1 21516 22855 22841	GRADIENT	CPB1 22188 22483 23013	GRAD I ENT	CPB1 22111 23804 00361	GRADIENT	CPB1 23288 23155 23924 00129	GRADIENT	CPB1 22648 22788 24041 00298
			0 0 0 2 0 0 2 0 0 2 0 0 2 0 0 2 0 0 2 0 0 3 0 3	L = 3.31	CPC 04976 06063 05876	L = 3.31	CPC 05489 06337 05831	L = 3.30	CPC 04441 05129 05787 00518	L = 3.31	CPC 05542 06457 06295	L = 3.32	CPC 05136 05245 06159 00219
. 1 - 11 - 104	ARC 14-160(CACSB)		375.0000	0/ 0 RN/L	XYCP .19263 .11427 01664	0/0 FN/L	XYCP .18809 .09575 05353	0/ 0 RN/L	XYCP .16798 .07948 08867	0/ 0 RN/L	XYCP .18782 .08232 09253	0/ 0 RN/L	XYCP .20088 .07147 09910
	į	ATA	XMRP YMRP ZMRP	RUN NO.	XZCP .18097 .15929 .15413	RUN NO.	xzcP .17665 .16620 .147;2 00650	RUN NO.	XZCP .17315 .16083 .14445 00643	RUN NO.	xZCP .16562 .15191 .13007	RUN NO.	XZCP .16096 .14511 .12208 00848
		REFERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		ALPHAC .039 2.367 4.353 GRADIENT		ALPHAC 027 2.372 9.478 9RADIENT		ALPHAC 013 2.543 4.374 GRADIENT		ALPHAC 162 2.450 4.437 GRADIENT		ALPHAC 132 2.364 4.412 GRADIENT
			SREF = 2690. LREF = 474. BREF = 936. SCALE = .		02 7.209 7.216 7.326		02 9.339 10.040 10.061		D2 14.643 15.082 14.801		D2 29.827 30.228 30.232		DZ 44.600 45.018 44.806

273	. 27		-1.000 .000 .000 .600		ល÷ល្ហ	. 27		5.000 .000 .000		38 113 57		50 02 90		8 8 8 8 8 8 8 8
PAGE	21 OCT		11 H H Z		CPS2 23796 23324 24565 00145	21 OCT		11 11 H		CPS2 21988 23013 22671		CPSZ -,22350 -,22191 -,22802 -,00090		CPS2 -,20959 -,20798 -,21863
	25) (C DATA	STAB ELEVON DX MACH		CPS1 18555 18240 20008) (75)	C DATA	STAB ELEVON DX MACH		CPS1 - 16628 - 17413 - 18044		CPS1 17533 17505 18001 00097		CPS1 .16357 .16447 .17227 .00181
	(ENH025)	PARAMETR1C	.000 .000 . 000 .000		, , , ,	(ENH027	PARAMETR1C	.000 .000 .000 .000		, , , ,				1111
		PAR	A DOER B	5.00	CPE3 23610 22194 22731		PAI	BETA = RUDDER = 10R8 = DY	5.00	CPE3 24489 24420 22699	5.00	CPE3 21944 21451 18166	5.00	CPE3 .77182 .79351 .72712
,	DATA)		BETA RUDDE! 10RB DY	-5.00/	CPB3 24860 24185 26102	R DATA)		BETA RUDDE 10RB DY	-5.00/	CPB3 00384 01883 01289	-5.00/	CPB3 00781 00569 01816	-5.00/	CPB3 00627 00330 01373
	SI CORBITER			INTERVAL .	CPB2 25137 25906 27585 00290	0351 (ORBITER			INTERVAL	CPB2 .00440 00909 00905	INTERVAL	CPB2 00240 .00198 01020	T INTERVAL	CPB2 .00158 .00190 00496
	747/1 ATI 0251			GRADIENT	CPB1 23477 22759 24646 00221	747/1 ATI 03			GRADIENT	CPB1 .00908 00565 00139	GRADIENT	CPB1 00023 00417 00664	GRADIENT	CPB1 .00348 .01148 00221
- CA23B	14-120(CA23B) 74		000 2.7.2 2.2.2	1 3.32	CPC 05784 05140 06956 00223	-120(CA238) 7		200 200 200 200 200 200	1. 3.28	CFC 00879 02316 02274 00335	/∟ ≈ 3.28	CPC - 01647 - 00980 - 02474 - 00158	11 = 3.27	CPC -,01223 -,00850 -,02251 -,00205
SOURCE DATA	ARC 14-12		1109.0000 1 0000 1 375.0000 1	0/0 RN/L	XYCP . 26013 . 05792 - 06113	ARC 14-12		1 109.0000 1 1 0000 . 375.0000	261/ 0 RN/L	xYCP 01531 1665 12989 02650	262/ 0 RN/L	XYCP .00582 04792 10371	263/ 0 RN/	XYCP 05493 09548 12241
TABULATED		ATA	XMRP #	RUN NO.	XZCP .15949 .14154 .11985 00854		ATA	XMRP # ZMRP #	RUN NO.	x2CP .13294 .13085 .11609 00391	RUN NO.	XZCP .12435 .12418 .11107	RUN NO.	x2CP .12131 .12002 .10350 00369
		REFERENCE DAT	0000 SO.FT. 8100 IN. 5800 IN. 0125		ALPHAC 233 2.449 4.339 GRADIENT		REFERENCE DATA	0000 SQ.FT. 8100 IN. 6800 IN. 0125		ALPHAC .046 2.283 4.288 GRADIENT		AL PHAC 171 2.437 4.384 GRADIENT		ALPHAC 143 2.462 4.479 GRADIENT
DATE 22 MAR 76		_	SREF = 2690.0000 LREF = 474.8100 BREF = 936.6800 SCALE = .0125		D2 49.823 50.763 50.761			SREF = 2690,0000 LREF = 474,8100 BREF = 936.6800 SCALE = .0125		02 7.310 7.309 7.865		02 9.835 9.901 9.652		02 14.936 14.990 15.447

ARC 14-120(CA23B) 747/1 ATI 0351 (ORBITER DATA)

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(ENH027)

	8550							_		0000		
	5.000 000.700 		CPS2 21938 22107 22405		CPS2 21447 21440 23033 00329		CPS2 22202 21698 22151	21 OCT 75		S. 000 000 10.000		CPS2 21541 21947
PARAMETRIC DATA	.000 STAB .000 ELEVON B.000 DX .000 MACH		CPS1 16936 17158 18127		CPS1 16967 18915 18058		CPS1 17305 16977 17888	(ENH028)	PARAMETRIC DATA	000 STAB 000 ELEVON 000 DX		CPS1 16617 16427
	17 A R R R R R R R R R R R R R R R R R R	5.00	CPE3 .70498 .71135 .69650	5.00	CPE3 .64763 .63245 .62424 00524	5.00	CPE3 .57874 .59986 .60276		PAR	BETA = RUDDER = 6	5.00	CPE3 .51581 .51346
	8 8.0.∨	-5.00/	CPB3 00498 01044 01235	-5.00/	CPB3 00203 00625 01758	-5.00/	CPB3 01333 01030 01634 00057	R DATA)		BETA RUDDA 10RB DY	-5.00/	CPB3 00285 00604
		I INTERVAL	CPB2 00174 00109 00385 00041	T INTERVAL	CPB2 .00521 .00335 00851	T INTERVAL	CPB2 00489 .00068 00616	03SI (ORBITER DATA)			INTERVAL	CPB2 .00809 .00134
		GRADIENT	CPB1 .00070 .00441 00111	GRADIENT	CPB1 .00676 .00335 00851	GRADIENT	CPB1 00380 .00617 00423	747/1 ATI 0			GRADIENT	CPB1 .01219 .00462
	7. X. 7. X. X. 7. X. X. X. 7. X.	11 = 3.27	CPC 01634 01512 02140	RN/L = 3.27	CPC -,00918 -,01338 -,02335	/ ₹ 3.28	CPC 02095 01057 02294 00022	ARC 14-120(CA23B)		IN. X0 IN. Y0 IN. Z0	1.= 3.28	CPC 00832 01396 00279
ATA	1109.0000 .0000 375.0000	54 / 0 RN/L	XYCP 04040 09044 12761 01914	0 /9	XYCP 06477 08831 13571	266/ 0 RN/L	XYCP 03505 08641 14077 02301	ARC 14-18		1109.0000 .0000 375.0000	281/ 0 RN/L	XYCP .02195 .00936 00623
	XMRP YMRP ZMRP	RUN NO. 26	xzcP .10760 .10811 .09352	RUN NO. 25	xZCP .10410 .10403 .08724 00350	RUN NO. 2	x2cP .10048 .10221 .08544 00311		ATA	XMRP YMRP ZMRP	RUN NO. PI	XZCP .14765 .14917
REFERENCE DATA	690,0000 SQ.FT. 474.8100 IN. 936.6800 IN.		ALPHAC - 161 2.529 4.385 GRADIENT		ALPHAC 113 2.534 4.379 GRADIENT		ALPHAC 137 2.437 4.427 GRADIENT		REFERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		ALPHAC 2.460 4.481 GRADIENT
	# 2690. # 474. # 936.		02 29.711 29.841 30.092		02 44.673 44.791 44.852		DZ 50.205 50.115 50.310					02 3.140 3.154
	SREF LREF BREF SCALE									SREF LREF BREF SCALL		

CPS2 -,23240 -,22858 -00154

CPS1 -.17627 -.17794 -.00067

CPE3 .46364 .49071 .01092

CPB3 -.02226 -.01235

CPB2 -,01060 -,00469

CPB1 -.00436 -.00277

CPC -.02579 -.01837

XYCP -.03977 -.07546 -.01440

XZCP .10505 .10677 .00069

ALPHAC 2.061 4.539 GRADIENT

50.200 50.258 50.258

5.00

-5.00/

GRADIENT INTERVAL

RUN NO. 287/ 0 RN/L = 3.29

5.000 CPS2 . 20935 . 21854 . 00465 CPS2 -.21721 -.21737 -.00007 CPS2 -.22398 -.22120 .00116 CPS2 ..22895 ..22698 -.22651 CP52 ٥ ũ STAB ELEVON DX MACH PARAMETRIC DATA -.16456 -.16803 -.00143 CPS1 -.17465 -.17129 .00140 CPS1 -.18201 -.17817 .00161 CPS1 -.17693 -.17452 -.17056 (ENH029) CPE3 .50090 .51559 .00623 CPE3 .50092 .51578 .00621 CPE3 .51832 .52196 .00184 CPE3 .51619 .52168 CPE3 .49745 .51423 .00704 5.00 5.00 5.00 BETA RUDOER 1 10RB 1 5.00 5.00 -.00238 -.00370 -.00067 CPB3 ..00385 ..00774 CPB3 -.01263 -.01036 CPB3 -.02422 -.01482 .00395 CPB3 -.01757 -.01172 .00248 -5.00/ -5.00/ -5.00/ -5.00/ -5.00/ 747/1 AT1 0351 (ORBITER DATA) GRADIENT INTERVAL CPB2 .00253 -.00179 INTERVAL INTERVAL INTERVAL INTERVAL CPB2 -.00455 -.00355 CPB2 -.01019 -.00473 CP32 .00161 -.00228 CPBR -.01084 -.00791 GRADIENT GRADIENT GRADIENT GRADIENT CPB1 .00852 -.00016 CPB1 .00406 .00126 CPB1 -.00158 -.00245 CPB1 -.00614 -.00364 CPB1 -.00518 .00135 3.29 3.28 3.28 = 3.29 RN/L = 3.28 ARC 14-120(CA23B) CPC -.00428 -.01270 -.00426 CPC -.01204 -.01482 -.00115 CPC -.02098 -.02382 -.00119 CPC -.01991 -.01527 .00194 CPC -.02322 -.02098 .00095 RNI PN/L RN/L 1 0000.0011 1 0000 375.0000 xYCP -.02321 -.07077 xYCP -.03352 -.09527 -.02542 XYCP -.06465 -.13034 -.02746 XYCP -.08440 -.14181 -.02410 XYCP -.08143 -.13930 -.02453 292/ 0 294/ 0 291/0 293/ 0 295/0 XZCP .12314 .11163 -.00582 XZCP .11089 .09969 -.00468 X2CP .11726 .10479 -.00513 x2CP .10335 .08836 -.00630 XZCP .10152 .08469 -.00718 RUN NO. RUN NO. RUN NO. SUN NO. SUN NO. REFERENCE DATA 50.FT. ALPHAC 2.465 4.442 GRADIENT ALPHAC 2.020 4.412 GRADIENT ALPHAC 2.128 4.510 GRADIENT AL PHAC 2.057 4.486 GRADIENT ALPHAC 2.087 4.446 GRADIENT 2690.0000 474.8100 935.6800 02 7.274 7.516 DZ 10.037 10.105 DZ 15.073 14.864 02 30.231 29.953 DZ 44.559 45.001 SREF LREF BREF SCALE

CPS2 ..22958 ..22354 .00240

CPS1 -.17953 -.18084 -.00052

CPE3 .49083 .51115

CPB3 -.01857 -.01587 .00067

CPB2 -.01262 -.00894 .00146

CPB1 -.00802 -.00811 -.00304

CPC -.02290 -.02372 -.00033

XYCP -.05923 -.11585 -.02247

XZCP .10064 .08291

ALPHAC 2.027 4.547 GRADIENT

50,108 50,709 50,709

-5.00/

INTERVAL

GRAD LENT

= 3.28

RN/

296/ 0

JCN NO.

PAGE 277	OCT 75)		5.000		CPS2 . 22026 . 21410 . 00328		CPS2 -,22279 -,21839		CPS2 22840 21785 .00465		CPS2 22968 23130 00062		CPS2 23110 23227 00050		CPS2 22925 22234 .00294												
a.	(ENH030) (21 (RIC DATA	O STAB #		CPS1 .16727 .16884 .00084		CPS1 CP 173322 172912		CPS1 CP 180462 175426		CPS1 CF 177796 183176		CPS1 CF 17747 6 18608 60369		CPS1 CI - 18009 - 17431 - 100246												
	įΣ.	PARAMETR	ER : .000	.00	CPE3 . 49915 . 50432	00.1	CPE3 .48539 .50623 .00842	3.00	CPE3 ,48550 .50540	5.00	CPE3 .48735 .50240	5.00	CPE3 .48584 .48384 00086	5.00	CPE3 .49112 .50632												
	DATA		BETA RUDDER 10RB DY	-5.00/ 5	CPB3 00444 00754 00165	-5.00/ 5	CPB3 01331 00772 .00226		CPB3 .99979 00761 44411	= -5.00/ 5	CPB3 01725 02230 00193	.5.00/	CPB3 02033 02292	-5.00/	CP83 01965 01057												
	(ORB11ER			INTERVAL .	CPB2 .00133 00315	INTERVAL =	CP92 00709 .00105	INTERVAL =	CPB2 01201 00268 .00411	INTERVAL	CPB2 00941 01322 00146	INTERVAL	CP32 01521 02022 00215	INTERVAL	CPB2 01343 00456												
	747/1 AT1 0351		XMRP = 1109.0000 IN. XO YMRP = .0000 IN. YO ZMRP = 375.0000 IN. ZO	GRADIENT	CPB1 .00050 .00480 .00229	GRADIENT	CP81 00276 .00352	GRADIENT	CPB1 -,00767 .00060 .00365	GRADIENT	CPB1 00536 00992 00175	GRADIENT	CPB1 00605 01590 00422	GRADIENT	CPB1 01046 .00117												
TABULATED SOURCE DATA - CA23B	14-120(CA238) 74			13.28	CPC 01570 01111	1 = 3.28	CPC 01844 01511 .00134	1 3.28	CPC 02040 01719 .00142	/L = 3.28	CPC 02130 02340 00080	/L = 3.29	CPC 02599 03670 00459	RN/L = 3.30	CPC 02127 01493												
	ARC			01/ 0 RN/L	XYCP .00071 05336 02876	02/ 0 RN/L	XYCP 00953 07767 02754	03/ 0 RN/L	XYCP 02578 07888 02341	304/ D RN/L	XYCP 05480 12193 02567	305/ O RN/L	XYCP 09409 13007 01542	306/ 0 RN	XYCP 06433 13563 03035												
		ATA		u H H	u n n	u n n	u n n	u n 11	H H H	XMRP = YMRP = ZMRP =	H H H	XMRP # ZMRP #	XMRP = YMRP = ZMRP =	u n n	u n 11	u H H	H H II	RUN NO. 30	XZCP .10962 .09929	RUN NO. 30	xZCP .10567 .09514 00426	RUN NO. 3	xZCP .10061 .09238 00363	RUN NO. 3	XZCP .09989 .08430 00596	RUN NO.	XZCP .09841 .08448
		REFERENCE DATA	0000 SQ.FT. 8100 IN. 6800 IN. 0125		RUN AL PHAC X 2.474 . 4.355 .		ALPHAC 2.021 4.495 GRADIENT		ALPHAC 2.172 4.441 GRADIENT		RU ALPHAC 1.934 4.549 GRADIENT -		ALPHAC 2.080 4.413 GRADIENT		ALPHAC 2.067 4.416 GRADIENT												
E 22 MAR 75		•	F = 2690.0000 F = 474.8100 F = 936.6800 LE = .0125		02 7.146 7.541		02 10.020 10.077		DZ 14.887 14.608		02 30.123 29.781		02 44.889 44.724		02 50.425 50.408												
DATE			SREF LREF BREF SCALE				h pto:	TRT A	T' DAG	· -	-																

ORIGINAL PAGE IS OF POOR QUALITY

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PAGE

5.000 20.000 20.000 CPS2 ..23201 ..21942 .00651 CPS2 -.23317 -.22316 .00391 CPS2 -.22186 -.22109 CPS2 -.23103 -.22064 .00433 CPS2 -.22355 -.22395 -.00017 CPS2 -.22031 -.22254 -.00087 21 OCT STAB ELEVON DX MACH ~ PARAMETRIC DATA CPS1 -.18406 -.17025 CPS1 -.17022 -.17487 -.00182 CPS1 -.18209 -.17309 CPS1 -.17647 -.17195 .00188 CPS1 -.16931 -.17381 -.00197 CPS1 -.16721 -.16984 -.00111 (ENH031) CPE3 .66614 .69475 CPE3 .51664 .52437 .00302 CPE3 .54531 .57868 .01391 CPE3 .49203 .51594 .01236 CPE3 .50489 .52923 .00950 CPE3 .53188 .54395 .00529 BETA RUDOER 1 5.00 5.00 5.00 5.00 5.00 5.00 CPB3 -.02343 -.00881 CPB3 -.00651 -.01102 -.00176 CPB3 -.02156 -.01304 .00333 CPB3 -.01002 -.01282 -.00123 CPB3 -.02007 -.00727 CPB3 -.00831 -.00971 -.00059 -5.00/ -5.00/ -5.00/ -5.00/ -5.00/ -5.00/ 747/1 ATI 0351 (ORBITER DATA) GRADIENT INTERVAL CPB2 -.01829 -.00253 INTERVAL INTERVAL INTERVAL INTERVAL CPB2 .00061 -.00307 -.00144 CPB2 1.13782 -.00291 -.44508 CPB2 .00010 -.00325 -.00147 INTERVAL CPB2 -.00147 -.00234 -.00037 CPB2 -.01250 -.00426 GRADIENT GRADIENT GRADIENT GRADIENT GRADIENT CPB1 -.00881 .00212 CPB1 .00170 .00241 CPB1 -,00886 -,00073 CPB1 .00229 -.00216 CPB1 -.00305 -.00016 CPB1 -.00174 .00313 .00206 3.29 = 3.29 3.29 = 3.29 RN/L = 3.30 RN/L = 3.29 ARC 14-120 (CA238) CPC -.02777 -.01018 CPC -.01363 -.01677 -.00123 CPC -.01967 -.01605 CPC -.01057 -.01938 -.00386 CPC -.02007 -.01657 .00146 CPC -.01761 -.01655 .00045 RN/L PN-. 0000 . 0000 375. 0000 XYCP .01033 -.01352 -.00932 .02051 -.00839 -.01494 XYCP .00899 -.00215 XYCP -.02280 -.07327 XYCP -.03558 -.06215 XYCP -.03911 -.08155 -.01792 315/0 312/ 0 316/0 314/ 0 313/ 0 RUN NO. 311/ 0 x2CP .10679 .11226 .00283 XZCP .10124 .10873 .00293 X2CP .09879 .10571 XZCP .10062 .10556 .00217 X2CP .10089 .10538 XZCP .10073 .10544 .00199 JON NO. SUN NO. SCN NO. PUN NO. SCN NO. REFERENCE DATA 2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN. ALPHAC 2.440 4.374 GRADIENT ALPHAC 2.003 4.371 GRADIENT ALPHAC 1.989 4.549 GRADIENT ALPHAC 1.961 1.524 GRADIENT ALPHAC 1.982 4.262 GRADIENT ALPHAC 1.970 9.370 GRADIENT 02 7.139 7.034 02 9.707 9.890 0**2** 29.655 29.802 02 44.676 44.732 02 50.207 50.098 02 14.857 14.654 SREF LREF BREF SCALE

DATE 22 MAR 75

TABULATED SOURCE DATA - CA238

747/1 ATI 0351 (ORBITER DATA)

PAGE

5.000. CPS2 -.22078 -.22735 -.00277 CPS2 -.22522 -.22869 -.00158 CPS2 ..23635 ..23000 CPS2 -.22564 -.24270 -.00715 -.22181 -.22550 -.00155 CPS2 -. 22624 -. 23391 -. 00395 21 OCT STAB ELEVON DX MACH CPS1 -.16699 -.17749 -.00444 CPS1 -.18342 -.17649 PARAMETRIC DATA CPS1 -.16840 -.17085 -.00111 CPS1 -.16714 -.17160 -.00187 CPS1 -.16642 -.18386 -.00731 CPS1 -.16894 -.16947 -.00027 (ENH032) .000 .000 6.000 CPE3 .64727 .65317 .00249 CPE3 .62539 .66110 CPE3 .65000 .65698 CPE3 .69567 .68434 -.00584 CPE3 .64737 .65715 .00411 CPE3 .64763 .63642 -.00470 5.00 5.00 5.00 5.00 5.00 5.00 BETA RUDDER : 10RB CPB3 -.00725 -.01539 -.00344 CPB3 -.00833 -.01696 -.00392 CPB3 -.02247 -.0:487 .00327 CPB3 -.01022 -.01684 -.00341 CPB3 -.00725 -.01920 -.00502 CPB3 -.00814 -.02812 -.00837 -5.00/ -5.00/ -5.00/ -5.00/ -5.00/ -5.00/ GRADIENT INTERVAL CPB2 -.00206 -.00694 -.00206 GRADIENT INTERVAL GRADIENT INTERVAL CPB2 -.00068 -.00905 -.00380 CPB2 -.01599 -.00750 INTERVAL CPB2 -.00233 -.01564 -.00559 CP82 -.00186 -.02164 -.00828 CPB2 -.00255 -.00592 -.00174 INTERVAL INTERVAL GRADIENT **GRADIENT** GRADIENT CPB1 .00203 -.00395 -.00253 CPB1 .00396 -.00495 -.00405 CPB1 -.01247 -.00531 CPB1 .00387 -.01759 -.00899 CPB1 .00047 -.00401 -.00231 CPB1 .00341 -.00935 -.00536 ≥ 3.30 3.30 RN/L = 3.30 **≠** 3.30 * 3.30 = 3.30 CPC -.01299 -.02275 -.00412 CPC -.02517 -.02305 .00091 CPC -.01543 -.02378 -.00380 CPC -.01572 -.02549 -.00410 -.01769 -.03540 -.00742 CPC -.02064 -.01848 ARC 14-120(CA23B) 222 375.0000 IN. 2 RN/L = RN/L RN/L RN/L RNL -.09348 -.20132 -.04637 xYCP -.10778 -.18028 -.03063 xYCP -.16867 -.37539 -.09397 -.17505 -.43025 -.10692 -.21501 -.37722 -.06813 -.27113 -.39356 -.06309 326/ 0 324/0 325/ 0 322/ 0 323/ 0 321/0 XZCP .11964 .12430 XZCP .13053 .13569 x2CP .11307 .11617 .00131 XZCP .15884 .16349 .00240 XZCP .13536 .14149 XZCP .!3827 .14337 RUN NO. 3CN NO. PUN NO. RUN NO. RUN NO. PUN NO. REFERENCE DATA 50.FT. ALPHAC 1.980 4.357 GPADIENT ALPHAC 1.958 4.325 GRADIENT ALPHAC 1.999 4.379 GRADIENT ALPHAC 2.049 4.248 GRADIENT ALPHAC 1,976 1,531 GRAUSENT ALPHAC 2.384 4.324 GRADIENT 2690.0000 474.8100 936.6800 10125 DZ 44.648 44.989 02 29.998 29.890 DZ 10.032 9.896 02 15.217 15.047 02 7.247 7.563 02 3.217 3.310 SREF LREF BREF SCALE

(ENH032) (21 OCT "

ARC 14-120(CA23B) 747/1 ATI 03SI (ORBITER DATA)

	0000			_		0000								
	5.000 .000 .000 .600		165 381 39+	OCT 75		5.000		2 720 3391 364		393 363 363		2 301 555 566		395 395 530
	# 11 11 N		CPS2 23165 23381 00094	r 21 00		# # # # Z		CPS2 21720 22391 00364		CPS2 -,21393 -,22269 -,00363		CPS2 22301 23655 00566		CPS2 -,21395 -,22669 -,00530
IC DATA	STAB ELEVON DX MACH		CPS1 17594 18249 00286	033)	IC DATA	STAB ELEVON DX MACH		CPS1 16636 16701 00035		CPS1 16199 17158 00397		CPS1 16872 18062 00497		CPS1 16783 17260 00198
PARAMETR1C	.000 .000 6.000			(ENH033	PARAMETRIC	.000 .000 .000 .000								
ď	н н » н СС	00	CPE3 .61912 .62663		à	# 11 H H	. 00	CPE3 .71335 .71598 .00143	00	CPE3 .70765 .71427 .00274	. 00	CPE3 .68596 .69286	.00	CPE3 .70209 .70889
	BETA RUDDE! 10RB DY	5.00/ 5.	CPB3 02172 02744 00249	A)		BETA RUDDE 10RB DY	5.00/ 5.	CPB3 00842 01290 00243	5.00/ 5.	CPB3 00400 00871 00195	.007	CPB3 .01552 .02840 .00538	.007	CPB3 00828 01087
		н		ER DATA					¥.		יי יל	000		
		INTERVAL	CPB2 01283 01696 00180	SI (ORBITER			INTERVAL	CPB2 00108 00419 00168	INTERVAL	CPB2 00210 00953 00308	INTERVAL	CPB2 00907 02007 00459	INTERVAL	CPB2 .00040 00815 00356
		GRADIENT	CPB1 00907 01320 00180	1 ATI 0351			GRADIENT	CPB1 .00463 .00289 .00094	GRADIENT	CPB1 .00443 .00518	GRADIENT	CPB1 00772 01496 00302	GRADIENT	CPB1 .00556 .00244 .00333
		3.30		747/1			3.30	'	.32	1 1	31		31	1 (
	N. 700 1N. 70		CPC 02791 03013 00097	14-120(CA23B)		X X X X X X X X X X X X X X X X X X X	IJ	CPC 01358 01671 00170	H M	CPC 01297 01931 00262	`L ± 3.	CPC 02331 03217 00370	'L = 3.	CPC 00963 06337 00571
	1109.0000 10000 375.0000	O RN/L	XYCP .09372 .16074 .03051	ARC 14-12		.0000 1 .0000 1 5.0000 1	0 RN/L	XYCP 31596 44126 06790	O RN/L	XYCP 24002 39905 06585	0 RN/L	XYCP .19725 .35072	0 RN/L	xYCP .12596 .28700
	3 6	327/	111	•		# 1109. # 375.	331/		332/		333/		334/	
ATA	XMRP YMRP ZMRP	RUN NO.	XZCP .11155 .11414		ATA	XMRP YMRP ZMRP	RUN NO.	XZCP .12901 .11918 00533	RON NO.	XZCP . 12541 . 11570 00402	RUN NO.	XZCP . 12165 . 10978 00495	RUN NO.	XZCP 11430 09725 00709
REFERENCE DATA	500 S0.FT.		ALPHAC 1.969 4.264 GRADIENT		REFERENCE DAT	0 SO.FT. 0 IN. 15 IN.		ALPHAC 2.446 4.292 GRADIENT		ALPHAC 1.907 4.322 GRADIENT		ALPHAC 1.933 4.327 GRADIENT		ALPHAC 1.958 4.362 GRAD I ENT
Æ	2690.0000 474.8100 936.6800				REF	2690.0000 474.8100 936.6800								
	14 14 18 11		02 49.978 50.163			и и и и Ю , о		02 7.500 7.613		02 10.263 9.859		02 15.012 14.957		02 29.834 29.957
	SREF LREF BREF SCALE					SREF LREF BREF SCALE								

DATE 22 MAR 76		TABULATED	SOURCE DATA	A - CA23B						PAGE 281
			ARC 14-18	14-120(CA23B) 7	747/1 AT1 03	03SI (ORBITER	R DATA)		(ENH033)	(21 OCT 75)
	REFERENCE DATA	1TA						PAR/	PARAMETRIC DATA	
SREF = 2690.0000 LREF = 474.8100 BREF = 936.6800 SCALE = .0125	0000 SQ.FT. 8100 IN. 6800 IN. 0125	XMRP YMRP 1 H	1109.0001 1000 375.0000	IN. X0 IN. Y0 IN. Z0			BETA RUDDER IORB DY	M W H	.000 STAB .000 ELEVON 8.000 DX 0.000 MACH	5.000
		RUN NO. 3	335/ 0 RN/L	1 = 3.30	GRADIENT	INTERVAL	= -5.00/ 5	.00		
007 44,819 45.000	ALPHAC 1.871 4.278 GRADIENT	XZCP .10980 .09213	XYCP 15746 20813 02106	CPC 02786 02027 .00315	CPB1 00866 00384	CPB2 01353 00439	CPB3 01623 01233	CPE3 .68229 .70769	CPS1 17849 17502	CPS2 22230 22048 .00076
		RUN NO. 3	335/ 0 RN/L	/L = 3.30	GRADIENT	INTERVAL	= -5.00/ 5	00.9		
DZ 50.002 50.443	ALPHAC 1.913 4.260 GRADIENT	xZCP .10835 .09014 00775	XYCP 12714 17695 02122	CPC 00969 02295 00565	CP81 .00314 00518 00354	CP82 .00150 00846	CPB3 00805 01311 00215	CPE3 .70147 .70455 .00131	CPS1 16496 17544 00446	CPS2 21627 22245 00263
			ARC 14-1	-120(CA23B) 7	747/1 ATI 03	0351 (ORBITER	R DATA)		(ENH034)	(21 0CT 75)
	REFERENCE DATA	ATA						PAR	PARAMETRIC DATA	ď
SREF = 2690.0000 LREF = 474.8100 BREF = 936.6800 SCALE = .0125	.0000 SQ.FT. .8100 IN. .6800 IN.	XMRP YMRP ZMRP	1109.0000 .0000 375.0000	IN. XO IN. YO IN. ZO			BETA RUDDER 10RB DY	3 3 3 1 1 1 1 1	.000 STAB .000 ELEVON 6.000 DX .000 MACH	000.00. # NOV
		RUN NO. 3	341/0 RN	RN/L = 3.31	GRADIENT	T INTERVAL	-5.00/	5.00		
20 1.515 4.51 1.364	ALPHAC 031 2.265 4.259 GRADIENT	x2CP .19185 .18497 .18342 .00039	XYCP 05120 05838 07181	CPC00048007450074300552	CPB1 .01212 .01003 00771	CPB2 .01185 .00593 00960	CPB3 .00007 00281 02119 00485	CPE3 .02336 .03107 .02707	CPS1 16405 16426 18214	CPS2 20076 20142 21907 00417
		PUN NO.	342/ 0 RN	RN/L = 3.31	GRADIENT	T INTERVAL	-5.00/	5.00		
DZ 3.218 2.877 3.380	ALPHAC 127 2.324 4.353 GRADIENT	XZCP .16942 .17815 .17626 .00100	XYCP 05713 03246 06313	CPC .00100 00619 01491	CPB1 .01546 .00746 .00504	CPB2 .01300 .00719 .00176 00250	CPB3 .00492 .00364 00698	CPE3 .05282 .04675 .04602	CPS1 15198 16173 17365	CPS2 19534 19938 20862 00292

(ENH034) (21.007.75.)

DATA
ORBITER
0351
AT.
1/247
14-120(CA23B)
ARC

	000°.		CPS2 20687 21048 21198 00115		CPS2 21117 20887 21547 00085		CPS2 21062 21254 21699 00138		CPS2 20616 21124 21996 00298		CPS2 20199 21314 23077
PARAMETRIC DATA	.000 STAB .000 ELEVON 6.000 DX .000 MACH		CPS1 -,17338 -,16947 -,17462 -,00017		CPS1 17079 16925 18052		CPS1 - 17073 - 17725 - 17849 - 100177		CPS1 16641 16866 17809		CPS1 16506 16775 18790
PARA	N H H H CC.	5.00	CPE3 .04943 .05831 .04985	5.00	CPE3 .05592 .0575 6 .04857 00151	5.00	CPE3 .05946 .05584 .05416 00119	5.00	CPE3 .06960 .06362 .0621	5.00	CPE3 . 06555 . 06741 . 05018
	BETA RUDDE 10RB DY	-5.00/	CPB3 00647 00677 00688	-5.00/	CPB3 00682 00748 01150	/00-5-	CPB3 00504 01028 00093	-5.00/	CPB3 00386 00734 00867	-5.00/	CPB3 00065 00669 01885
			CPB2 00512 . 00034 . 00021	INTERVAL ≖	CPB2 00062 00228 00467 00089	INTERVAL =	CPB2 00092 00106 00482	INTERVAL =	CPB2 .00601 00025 00375	INTERVAL =	CP82 .00%00 .00233 01130
		GRADIENT INTERVAL	CPB1 00242 .00116 .00185	GRADIENT	CPB1 .00314 .00564 00085	GRADIENT	CPB1 00038 .00222 .00173	GRADIENT	CPB1 .00738 .00558 .00200	GRADIENT	CPB1 .01002 .00452 00941
	IN. XO IN. YO ZO	/L = 3.30	CPC 02025 01224 01425	'L ≈ 3.30	CPC 01005 00966 01778	1 = 3.30	CPC 01305 01119 01493	1. = 3.29	CPC 00605 01089 01634	'L = 3.30	CPC 00941 01107 02478 00325
ATA	XMRP = 1109,0000 1 YMRP = .0000 1 ZMRP = 375,0000 1	343/ 0 RN/L	XYCP 05239 06065 07278 00446	14/ 0 FN/L	XYCP 04912 06056 08566 00792	5/ 0 RN/L	XYCP 06512 06986 07251	45/ 0 RN/L	XYCP 06330 05607 12378 01236	347/ 0 RN/L	xyCP 10242 08751 12987 00544
		RUN NO. 3	XZCP .14533 .15567 .16003 .00331	XZCP .13489 .14836 .15145	RUN NO. 345/	XZCP .12039 .13633 .14095	RUN NO. 345/	x2CP .10561 .12620 .12623	RUN NO. 3	XZCP .10088 .11885 .11827 .00401	
REFERENCE DATA	9590.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		ALPHAC - 285 2.312 4.212 GRADIENT		ALPHAC 243 2.334 4.253 GRADIENT		ALPHAC 254 2.332 4.248 GRADIENT		ALPHAC 267 2.360 4.269 GRADIENT		ALPHAC 235 2.345 4.291 GRADIENT
	SREF = 2690. LREF = 474. BREF = 936. SCALE =		02 7.400 7.390 7.046		D2 9.858 9.870 9.840		02 14.745 14.663 14.715		DZ 29.743 29.911 29.627		02 44.607 44.784 44.631

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PAGE 283	21 OCT 75		STAB = 5 ELEVON = DX = MACH =		CPS2 20131 20575 21932 00386		CPS2 20300 20565 21998 00360	21 OCT 75				CPS2 22363 24632 24963 00623		CPS2 -,23580 -,23601 -,24195 -,00129	
	(ENH034)	TRIC DATA	.000 STAB .000 ELEVON .000 DX .000 MACH		CPS1 16504 17169 17349 00191		CPS1 -,15689 -,16754 -,17877 -,00477	(ENH035)	ETRIC DATA	000 STAB 000 ELEVON 000 DX 000 MACH		CPS1 17893 19613 19812 60460		CPS1 18438 18542 19595 00244	
	9)	PARAME TRI	() () () () () () () () () () () () () (.00	CPE3 .06155 .06642 .06304	00	CPE3 .06085 .06138 .05836	_	PARAMETRI	18 B	5.00	CPE3 21333 22016 21974 00155	5.00	CPE3 22349 21382 21976	
	DATA		BETA RUDDEF 10RB DY	-5.00/ 5	CPB3 00171 00115 00980	-5.00/ 5	CPB3 00218 00041 00577 00072	DATA		BETA RUDDER IORB DY	-5.00/	CPB3 01447 03142 03798 00560	5.00/	CPB3 02289 02258 02954	
	1 (ORBITER			INTERVAL .	CPB2 .00783 .00648 00325	INTERVAL =	CP32 .03491 .09231 00304	03SI (ORBITER			INTERVAL	CPB2 00607 02848 03211 03624	INTERVAL	CPB2 01513 01690 02061	
	747/1 AT1 0351		IN. XO IN. YO IN. ZO	GRADIENT	CPB1 .00511 .00457 .00111	GRADIENT	CPB1 .00046 .00694 .00051	747/1 AT1 03			GRADIENT	CPB1 00743 02368 02517 00426	GRADIENT	CPB1 01620 01149 01871 00042	
- CA238				L = 3.30	CPC 00607 00796 01990	L = 3.31	CPC 00764 00993 01696	-120(CA23B) 7		IN. X0 IN. Y0 IN. Z0	/ = 3.30	CPC 02233 03863 04198	//L = 3.29	CPC -,03012 -,02853 -,04009 -,00205	
SOURCE DATA	ARC 14		1 0000.0011 1 0000.375	375.0000 375.0000	XYCP XYCP 08283 07557 10339 00413	.YCP 07170 08961 10658	ARC 14-18		0000. 0000 375.	351/ 0 RN/L	xYCP 01376 01746 02353 00229	352/ 0 RN/L	XYCP 00348 00504 03925 00745		
TARIH ATED		∢ ⊢	XMRP = 1 YMRP = 2MRP	XMRP = 1 YMRP = 2MRP	RUN NO. 348	78 06 89 96	RUN NO. 3	XZCP . 09838 . 11400 . 11172		ATA	XMRP = YMRP = ZMRP =	RUN NO.	x2CP .23936 .19574 .18192	RUN NO.	xZCP .18137 .15964 .15714 00557
		140	1000 SO.FT. 100 IN. 1800 IN.	C 20 10	AL PHAC -,239 2,361 4,269 GRAD IENT		AL PHAC 279 2 . 289 4 . 275 GRAD I ENT		REFERENCE DATA	0000 SQ.FT. 8100 IN. 6800 IN. 0125		ALPHAC .007 2.270 4.244 GRADIENT		ALPHAC 212 2 .387 4 .282 GRADIENT	
AT GAM CC STAG	<u>.</u>	L	= 2690. = 474. = 936.	SCALE =	02 49.960 50.084 50.051		02 61.655 61.629 61.640		REF	SREF = 2690.0000 LREF = 474.8100 BREF = 936.6800 SCALE = .0125		02 3.392 3.273 3.273		02 7.633 7.582 7.362	

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i i				CPS2 22119 23121 24432		CPS2 23397 23829 25371 00418		CPS2 23066 23739 24838		CPS2 23348 24279 23801
(ENH035) (PARAMETRIC DATA	.000 STAB .000 ELEVON 4.000 DX .000 MACH		CPS1 17335 18452 19653 00515		CPS1 18917 19294 20039 00240		CPS1 18916 19287 00281		CPS1 18349 19376 19112
	PARAN		5.00	CPE3 21038 21880 21597	5.00	CPE3 28277 21939 22732	5.00	CPE3 22774 22095 2-21721 -50584	5.00	CPE3 -,22546 -,22528 -,21995
R DATA)		BETA RUDDER 10RB DY	-5.00/	CPB3 01243 02643 00311	-5.00/	CPB3 02173 02259 03508	-5.00/	CP83 02452 03426 03427	-5.00/	CPB3 02363 02457 01891
03S1 (ORBITER DATA)			I INTERVAL	CPB2 00418 01882 01968	INTERVAL	CP32 - 01534 - 01638 - 03401	INTERVAL	CPB2 01575 01779 02580	INTERVAL	CPB2 01587 01810 01622
747/1 AT1 0			GRADIENT	CPB1 00634 01477 01348 00168	GRADIENT	CPB1 01694 01260 03055 00274	GRADIENT	CPB1 01734 01240 01934 00031	GRADIENT	CPB1 01160 01190 01406 00052
ARC 14-120(CA23B)		IN. XO IN. ZO IN. ZO	/∟ 3.29	CPC 02364 03015 03534 00262	/L = 3.29	CPC 02787 03150 04681	راء 3.29	CPC 02823 03534 03550	1 = 3.30	CPC 02470 02942 03239 00170
ARC 14-1		1109.0000 .0000 375.0000	353/ 0 RN/L	XYCP .00535 .01447 0135+ 00384	154 0 RN/L	XYCP -,00320 -,03946 -,01397 -,00294	355/ 0 RN/L	xYCP 02424 02067 06359	356/ 0 RN/L	XYCP 06093 08030 10573
	DATA	XMRP TMRP TMRP TMRP	RUN NO.	XZCP .16352 .14473 .14843	RUN NO. 3	XZCP .13553 .13056 .13713	RUN NO. 3	XZCP .11088 .11185 .12485	RUN NO. 3	xZCP .10183 .10410 .11545
	REFERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 935.6800 IN.		ALPHAC 213 2.313 4.259 GRADIENT		ALPHAC 270 2.324 4.304 GRADIENT		ALPHAC - 272 2.346 4.294 GRADIENT		ALPHAC 271 2 . 322 4 . 260 GRADIENT
		SREF = 2690. LREF = 474. BREF = 936. SCALE =		07 9.664 9.916 9.803		DZ 15.113 14.808 14.693		02 29.891 29.979 29.891		02 44,449 44,799 44,865

DATE 22 MAR 76 TABUL

TABULATED SOURCE DATA - CA23B

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DATE 22 MAR 76 REFER SREF = 2690.0000 LREF = 474.8100 BREF = 936.6800 SCALE = 0.0125 DZ AL 1.654 6 2.469 6	REFERENCE DATA 0000 SQ.FT. 8100 IN. 6800 IN. 0125 RU ALPHAC 2.302 4.194 GRADIENT -	XMRP = YMRP = ZMRP = XMRP = XM	ARC ARC (109.0 / 0 / 0 / 0 / 0 / 0 / 0 / 0 / 0 / 0 /	CA23B) X0 Y0 Y0 Z0 CPC CPC 0424B 03415 00440	GRADIENT 1 CPB1 02300 01661 01661 01338	INTERVAL = CPB20262002335 .00151	DATA) BET RUD 10R DY -5.00/ CPB303368033037	PARAI	ENHU36) ETRIC DATA 000 STAB 000 DX 000 MACH CPS11949919499	CPS2 CPS2 CPS2 CPS2 CPS3 CPS3 CPS3 CPS3 CPS3 CPS3 CPS3 CPS3
02 2.877 3.365	ALPHAC 2.012 4.405 GRADIENT	X2CP .16907 .16821 00036	XYCP 06262 04781 .00519 363/ 0 RN/L	CPC 03937 03756 .00075	CP81 02255 02133 .00051 GRADIENT	CPB20249602323 .00072	CPB3 03296 03351 00023	CPE3 20831 20581 .00104	CPS1 19069 19283 00089	CPS2 23580 23313 .00111
02 7.393 7.226	ALPHAC 2.013 4.376 GRADIENT	XZCP .14649 .15013 .00154	XYCP 02173 05107 01241 364/ 0 RN/L	CPC 03739 03711 .00012 /L = 3.30	CPB1 02218 02168 .00021	CPB2 02805 02411 .00166	CPB3 03072 03089 00007	CPE3 20790 20906 00049	CPS1 18869 19634 00324	CPS2 24046 23587 00194
02 9.858 10.104	ALPHAC 2.049 4.457 GRADIENT	XZCP .13756 .14154 .00165	XYCP 00731 06553 02463 365/ 0 RN	CPC 03986 03416 .00237 RN/L = 3.29	CPB1 02298 01953 .00143 GRADIENT	CPB2 -,03129 -,02360 .00319 INTERVAL	CPB3 03745 03145 .00249	CPE3 21589 21076 .00213	CPS1 19981 19857 .00052	CPS2 24562 23730 .00346
07 14.553 14.553	ALPHAC 2.097 4.474 GRADIENT	XZCP .12892 .13321 .00180 RUN NO.	xYCP 02556 05133 01569	CPC 04065 05109 00439 03.29	CPB1 01923 03475 00653 GRADIENT	CPB2 02110 03529 00597 INTERVAL	CPB3 03208 04252 00439	CPE3213632182200193	CPS1 20426 20563 00058	CPS2 24095 24955 00362
02 29.819 29.992	ALPHAC 2.159 4.411 GRADIENT	xZCP .11685 .11826	X YCF 04814 071556 0.340	CPC 04159 03785	CPB1 02764 01966 .00355	CPB2 02845 02427 .00186	CPB3 03998 03079	CPE3 21514 20545 .00475	CPS1 19951 19621 .00147	CPS2 -,24348 -,24347 .00000

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	(21 OCT 73				CPS2 -,24352 -,23804 -,00236		CPS2 24055 24229 00072		CPS2 24749 24315 .00191	(21 OCT 75		T # # # #		CPS2 22592 23518 23224 00158
	(ENH036)	PARAMETRIC DATA	0.000 STAB 0.000 ELEVON 6.000 DX .000 MACH		CPS1 20002 19149 .00368		CPS1 19571 19682 00046		CPS1 19568 19576 00003	(ENH037)	PARAMETRIC DATA	.000 STAB .000 ELEVON 6.000 DX .000 MACH		CPS1 18380 19040 18868 00123
		PAR	7A DOER # # #	5.00	CPE3 18874 16091	5.00	CPE3 15248 13937	5.00	CPE3 -,13583 -,12359		PAR	n it ii n	5.00	CPE3 05689 05791 04651
	(ORBITER DATA)		38 5 7 9	-5.00/	CPB3 03619 02693	-5.00/	CPB3 03568 02910	-5.00/	CPB3 03490 02554 00411	R DATA)		BETA RUDDI I ORB DY	-5.00/	CPB3 02669 02701 00701
	0351 (ORBITE			IT INTERVAL	CP82 03243 01719	IT INTERVAL	CFB2 02870 02447 .00174	IT INTERVAL	CPB2 02953 02227 .00319	O3S1 (ORBITER			T INTERVAL	CPB2 02112 02559 01979
	747/1 AT1 0			GRADIENT	CPB1 02760 01367 .00600	GRAD I ENT	CPB1 02360 01739	GRADIENT	CP81 02496 01900	747/1 ATI 0			GRADIENT	CPB1 01927 02029 01391
	14-120(CA23B)		IN. X0 IN. Z0 IN. Z0	RN/L = 3.29	CPC 04049 03370	RN/L = 3.30	CPC 04266 03373 .00368	/L = 3.30	CPC 04483 03452 .00453	ARC 14-120(CA23B)		IN. X0 IN. Y0 IN. Z0	/L = 3.33	CPC 03464 03645 02968 00135
	ARC 14-1		1109.0000 .0000 375.0000	367/ 0 RN	XYCP 05044 07170 00917	368/ 0 RN	XYCP 03370 10445 02918	369/ 0 RN/L	XYCP ~.03261 ~.07242 01748	ARC 14-18		375.0000	3711 0 RN/L	XYCP 02908 06215 06523 00928
		DATA	XMRP YMRP = ZMRP = =	RUN NO.	XZCP .10875 .11163 .00124	RUN NO. 3	XZCP .10592 .10784 .00079	RUN NO. 3	xZCP .10533 .10468 00029		ATA	XMRP YMRP = 2MRP	RUN NO. 3	xzcP .17910 .18212 .17997
		REFERENCE DATA	2690,0000 SQ.FT. 474,9100 IN. 936,6800 IN.		ALPHAC 2.052 4.371 GRADIENT		ALPHAC 2.015 4.439 GRADIENT		ALPHAC 2.140 4.416 GRADIENT		PEFERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		ALPHAC .521 2.297 4.335 GRADIENT
			SREF = 2690, LREF = 474, BREF = 936, SCALE =		DZ 45.057 44.937		02 50 . 129 50 . 420		02 62.057 61.853			SPEF = 2690. LPEF = 474. BREF = 936. SCALE = 936.		02 1.955 1.879 1.932

PAGE 287	21 OCT 75)		11.000		CPS2 22172 23398 23524 00295		CPS2 22069 22855 23641		CPS2 22289 23709 0337		CPS2 23597 23566 23510		CPS2 23564 23498 23412											
	(ENH037)	ETRIC DATA	.000 STAB .000 ELEVON .000 DX .000 MACH		CPS1 18677 18199 18841		CPS1 18808 18700 19346 00107		CPS1 17584 19413 19275		CPS1 19032 19510 19129 00025		CPS1 19347 19060 19627 00058											
	-	PARAMETR	τ H H H L	5.00	CPE3054900437304469	5.00	CPE3 -,05873 -,04490 -,04880	5.00	CPE3 04759 05623 04725	5.00	CPE3 06427 05964 04938	5.00	CPE3 06537 05770 05321											
	DATA)		BETA RUDDEF 10RB DY	-5.00/	CPB3 02762 02421 02650	-5.00/	CPB3 02586 02452 03323	-5.007	CPB3 01829 03131 02708	-5.00/	CPB3 03056 03578 02653 .00085	* -5.007	CPB3 03381 03112 02771											
	SI (ORBITER			INTERVAL	CPB2 01968 01518 01740	INTERVAL	CPB2 01790 01648 02196	INTERVAL	CPB2 00915 02388 02385	I INTERVAL	CFB2 02260 [-2650 01793	I INTERVAL	CPB2 02512 02820 02019											
	747/1 AT1 0351			GRADIENT	CPB1 01703 00816 01445	GRADIENT	CPB1 01870 01460 01632	GRADIENT	CPB1 -,00726 -,02441 -,01739	GRADIENT	CPB1 02128 02200 01578	GRADIENT	CPB1 ~.02453 ~.02634 ~.02153											
- CA23B	14-120(CA23B) 7		XMRP = 1109.0000 IN. XO YMRP = .0000 IN. YO ZMRP = 375.0000 IN. ZO	1109.0000 1N. .0000 1N. 375.0000 1N.	CPC 03239 02902 03292	1 = 3.32	CPC 03460 03095 03350	ال = 3.31	CPC 02743 04218 04026	1 = 3.31	CPC 03375 03976 03379	1 ≥ 3.32	CPC 03832 04601 03737 .00014											
SOURCE DATA	ARC 14-12				XYCP .01545 03342 02790 01019	XYCP 01276 00908 06922	374/ 0 RN/	XYCP 02340 03078 06148	375/ 0 RN/L	×YCP 01408 02907 10096	376/ 0 RN/L	XYCP 08822 03354 08135												
TABULATED S		ATA		* * 11	# H H E		* + + +		65 H H	61 H H	6 5 H H	8 5 st H	e of H	# H H 75	* * *	. 372	xZCP .16521 .17561 .17384 .00204	RUN NO. 37.	XZCP .14046 .15435 .15516	RUN NO. 3	x2CP .12974 .14696 .14746	RUN NO. 3	xZCP .11763 .13520 .13796	RUN NO.
		REFERENCE DAT	0000 SQ.FT. B100 IN. 6800 IN. 0125		ALPHAC 073 2.415 4.372 GRADIENT		ALPHAC 184 2.515 4.353 GRADIENT		ALPHAC 096 2.401 4.474 GRADIENT		ALPHAC . 036 2.374 4.458 GRADIENT		ALPHAC 037 2.359 4.506 GRADIENT											
DATE 22 MAR 76		_	SREF = 2690.0000 LREF = 474.8100 BREF = 936.6800 SCALE = .0125		02 3.611 3.412 3.341		DZ 7.238 7.511 7.497		DZ 10.003 9.942 10.030		20 627.41 066.41		DZ 29. 795 29. 929 30. 138											

-1.u00 .000 .000 5.000 5.000 600 75 21 OCT 75 CPS2 -.23348 -.23533 -.24323 CPS2 -.22700 -.23545 -.00168 CPS2 -.23064 -.2258 -.24697 -.00353 CPS2 -.25149 -.25436 -.25674 -.00121 21 OCT STAB ELEVON DX MACH STAB ELEVON DX J MACH PARAMETRIC DATA PARAMETRIC DATA CPS1 -.18897 -.18330 -.19162 -.00040 CPS1 -.19413 -.18313 -.19455 .00004 CPS1 -.18584 -.18977 -.19901 CPS1 -.20054 -.20386 -.20597 -.00125 (ENH037) (ENH038) .000 .000 6.000 CPE3 -.06769 -.05235 -.05502 CPE3 -.07088 -.05875 -.06014 CPE3 -.07501 -.05639 -.06844 CPE3 -.05733 -.05046 -.01821 5.00 BETA RUDDER 10RB DY 5.00 -5.00/ 5.00 5.00 BETA RUDDER 10RB DY **≠** -5.00/ CPB3 -.03259 -.01566 -.03055 CPB3 -.02910 -.02883 -.02778 -.03237 -.02511 -.04023 -.00163 -.04446 -.04455 -.05151 -5.00/ -5.00/ 747/1 ATI 0351 (ORBITER DATA) CPB3 ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA) ŧ! GRADIENT INTERVAL GRADIENT INTERVAL CPB2 -.02487 -.00575 -.01899 GRADIENT INTERVAL GRADIENT INTERVAL CPB2 -.02404 -.02047 -.02185 .00050 CP82 -.02411 -.02026 -.03385 CPB2 -.03373 -.03461 -.03943 -.02222 -.00950 -.01603 -.02032 -.01697 -.01888 -.02305 -.01271 -.02799 -.00096 CPB1 -.03078 -.02951 -.03325 FN/L = 3.31 RN/L = 3.31 3.34 ARC 14-120(CA23B) CPC -.03737 -.02611 -.03458 .00092 CPC -.03682 -.03314 -.03587 CPC -.04170 -.02970 -.04635 -.00087 CPC -.04339 -.04939 -.05313 258 1109.0000 IN. XO .0000 IN. YO 375.0000 IN. ZO 375.0000 IN. 2 RN/L = RN/L = -.05207 -.04751 -.09743 -.00951 XYCP -.04897 -.05467 -.13541 XYCP -.08061 -.07173 -.11748 -.00798 XYCP .17448 .14641 .15066 378/ 0 379/0 377/ 0 381/0 XZCP .094**93** .11698 .11431 xZCP .09390 .11257 .11!60 XZCP .09106 .10863 .10863 XZCP -.00363 .02522 .04051 RUN NO. RUN NO. RUN NO. RUN NO. YMRP ZMRP YMRP PEFERENCE DATA REFERENCE DATA 2690.0000 SO.FT. 474.8100 IN. 936.6800 IN. 2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN. AL PHAC -. 096 2.497 4.260 GRADIENT ALPHAC .036 2.316 4.524 GRADIENT ALPHAC .046 2.293 4.387 GRAD1ENT AL PHAC -.013 2.379 4.408 GRAD IENT DZ 45.027 44.952 44.914 DZ 50.481 50.592 50.369 61.632 61.965 61.651 1.503 1.569 2.306 20 SREF LREF BREF SCALE SREF LREF BREF SCALE

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ARC 14-120(CA23B) 747/1 ATI 0351 (ORBITER DATA)

DATA) (ENH038) (21 OCT 75)	PARAMETRIC DATA	BETA000 STAB . 5.000 RUDDER000 ELEVON . 5.000 10RB . 6.000 DX000 DY000 MACH600	-5.00/ 5.00	CPB3 CPE3 CPS1 CPS205038057862034025521048420462620730261340539405340216822656100075001160030100260	-5.00/ 5.00	CPB3 CPE3 CPS1 CPS205786063502142626470047380509121502265010535004915209962657400123003430009100023	-5.00/ 5.00	CPB3 CPE3 CPS1 CPS20586506536212432593905204053132088526593 .00250 .00462 .0013500247	DATA) (ENH039) (08 OCT 75)	PARAMETRIC DATA	BETA = .000 STAB = 5.000 RUDDER = 10.000 ELEVON = 5.000 10RB = 6.000 DX = .000 DY = .000 MACH = .600	-5.00/ 5.00	CPB3 CPE3 CPS1 CPS2 26713029372074226070 26929034742081125780 001150028600037 .00155
747/1 AT1 0351 (ORBITER DATA)			31 GRADIENT INTERVAL =	CPB1 CPB2 0418404290 0338304156 0396004718 .0005100092	30 GRADIENT INTERVAL =	CPB1 C°B2 0417705116 0373204058 0333603990 .00193 .00271	30 GRADIENT INTERVAL =	CPB1 CPB2 04738 04845 03791 04199 00358 00244	747/1 ATI 0251 (ORBITER DA			.36 GRADIENT INTERVAL = .	CPB1 CPB2 25026 28558 25546 26558 00331 00270
ARC 14-120(CA23B)	ATA	XMRP = 1109.0000 IN. XO YMRP = .0000 IN. YO ZMRP = 375.0000 IN. ZO	RUN NO. 387/ 0 RN/L * 3.	XZCP XYCP CPC0573205005 .271510573205328 .00295 .005328 .00092 .00092 .00092	RUN NO. 388/ 0 KN/L = 3.	XZCP XYCP CPC05368 .230120575901436 .2864105417 .00119 .2764005649 .01289 .01151	RUN NO. 389/ 0 RN/L = 3.	x2CP xYCP CPC 06116 .2552806214 01802 .3085905639 .01632 .02016 .00217	ARC 14-120(CA23B)	ATA	XMRP = 1109.0000 1N. XO YMPP = .0000 1N. YO ZMRP = 375.0000 1N. ZO	RUN NO. 391/ 0 RN/L * 3.	XZCP XYCP CPC .07128 .235807837 .07717 .1962308282 .003140209900238
	REFERENCE DAT	SREF = 2690.0000 SQ.FT. LREF = 474.8100 IN. BREF = 936.6800 IN. SCALE = .0125		DZ ALPHAC 44.879 .070 44.946 2.481 44.926 4.448 GRADIENT		DZ ALPHAC 49.971037 50.192 2.513 50.609 4.284 GRADIENT		DZ ALPHAC 61.515 - 115 60.520 2.529 GRADIENT		REFERENCE DATA	SREF = 2690.0000 SQ.FT. LREF = 474.8130 IN. BREF = 936.6800 IN. SCALE = .0125		02 ALPHAC 3.148 2.388 3.390 4.263 GPADENT

PAGE 29	(08 OCT 75		55.000 00.2 = NO.000 .000.		CPS2 26602 26554 00021		CPS2 25703 26882 00487		CPS2 26086 27280 00521		CPS2 26045 25882		CPS2 27778 26796		CPS2 26701 26633
	(ENH038)	PARAMETRIC DATA	.000 STAB .000 ELEVON .000 DX .000 MACH		CPS1 21837 21194 .00277		CPS1 20456 21994 00635		CPS1 20930 22983 00896		CPS1 20777 20919 00058		CPS1 21882 21418 .00210		CPS1 21004 21936 00410
		PARA	BETA = 10 RUDDER = 10 10RB = 6 DY = 6	5.00	CPE3 04843 03773 .00461	5.00	CPE3 03511 04530 00420	5.00	CPE3 -,03968 -,05139 -,00511	5.00	CPE3 64758 04536	5.00	CPE3 05991 05442 .00249	5.00	CPE3 05732 06261 00233
	(ORBITER DATA)		19 89	-5.00/	CPB3 28058 27385 00290	-5.00/	CPB3 26961 27913 00393	-5.00/	CPB3 27208 28149 00411	-5.00/	CPB3 27596 27749 00062	-5.00/	CPB3 28519 28536 00008	/00.5- = .	CPB3 28231 28718 00214
	02S1 (ORBITE			T INTERVAL	CPB2 29858 28725	IT INTERVAL	CPB2 28112 29234 00463	IT INTERVAL	CPB2 -,28329 -,29705 -,00600	INTERVAL	CPB2 29201 29083 00048	AT INTERVAL	CPB2 29894 29670 .00102	NT INTERVAL	CPB2 29999 30222
	0 11A 11747			GRADIENT	CPB1 26840 25429	GRADIENT	CPB1 25141 26407 00522	GRADIENT	CPB1 25257 26700 00629	GRADIENT	CPB1 25911 25882 .00012	S GRADIENT	CPB1 26853 25638	3 GRADIENT	CPB1 26754 27161
4 - CA238	-120(CA23B)		IN. X0 IN. Y0 IN. Z0	/L = 3.34	CPC 09449 08651	RN/L = 3.34	CPC 07714 09391	RN/L = 3.34	CPC 07548 10068 01100	1/1 = 3.33	CPC 08127 08432	1/1 = 3.33	CPC 08794 09106 00142	RN/L = 3.3	CPC 0897 6 09612
SOURCE DATA	ARC 14-1		375.0000	392/ C RN/L	XYCP .24728 .15008 03756	393/ 0 RN	XYCP . 25164 . 18650	394/ 0 RN	XYCP . 26252 . 18829 03239	395/ 0 RN/	XYCP . 25570 . 16546 03970	396/ 0 RN/	XYCP . 25610 . 16536 . 04065	397/ 0 RI	X X X X X X X X X X X X X X X X X X X
TABULATED		ATA	XARP YARP ZARP	RUN NO.	XZCP .06124 .06940	RUN NO.	X2CP .05786 .06602	RUN NO.	xZCP .05459 .06296 .00355	RUN NO.	XZCP .04738 .05575	RUN NO.	XZCP .04381 .04951	RUN NO.	XZCP . 04207 . 04730
		REFERENCE DATA	2690.0000 SO.FT. 474.8100 IN. 936.6800 IN.		ALPHAC 2.139 4.461 GRADIENT		ALPHAC 2.001 4.424 GRADIENT		ALPHAC 2.141 4.433 GRADIENT		ALPHAC 2.045 4.494 GRADIENT		ALPHAC 2.160 4.367 GRADIENT		ALPHAC 2.123 4.396 GRADIFNI
DATE 22 MAR 76			SREF = 2690. LREF = 474. BREF = 936. SCALE =		02 7.312 7.376		02 9.885 10.083		DZ 15.083 14.830		02 29.781 29.790		02 70 78.44 873		DZ 50.286 50.569

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75)		5.000 5.000 .000										
08 OCT 7		N 41 H H		CPS2 24019 26271 26616 00597		CPS2 24915 25458 27349		CPS2 24631 24714 26705 00463		CPS2 25250 25777 27053		CPS2 25082 25441 26899 00386
(ENHORO) (RIC DATA	STAB ELEVON DX MACH		CPS1 18957 21680 21064	٠	CPS1 19581 20064 21989		CPS1 19787 20391 21047		CPS1 20331 20239 22286		CPS1 19698 19759 21526 00379
Ę.	PARAMETR 1 C											
	PAF	BETA RUDDER RIONER RION	5.00	CPE3 04096 05051 04409	5.00	CPE3 04392 04343 05645	5.00	CPE3 04687 04560 04586	5.00	CPE3 05788 04894 05508	5.00	CPE3 05442 04328 05135
R DATA)		BETA RUDDE 10RB DY	-5.00/	CPB3 28350 27510 00188	-5.00/	CPB3 28462 27453 28469	-5.00/	CPB3 28365 27740 27944 .00107	-5.00/	CPB3 29233 27884 28465	-5.00/	CPB3 28842 27730 28249
O251 (ORBITER DATA)			INTERVAL	CPB2 -,29974 -,29874 -,29162 -,00182	INTERVAL	CPB2 29978 298316 29855	INTERVAL	CPB2 -,29799 -,29415 -,29318	INTERVAL	CPB2 30650 29803 29530	INTERVAL	CPB2 30600 29965 29545 00237
747/1 ATI 06			GRADIENT	CP81 25833 25885 00015	GRAD I ENT	CPB1 26188 24972 26922	GRADIENT	CPB1 25767 26011 26435	GRADIENT	CPB1 26640 26426 26974 00061	GRADIENT	CP81 26326 25926 26737
		2 2 2 X X X X X X X X X X X X X X X X X	L = 3.33	CPC 06424 08468 08417 00461	L = 3.32	CPC 06747 07174 09298 00545	L = 3.32	CPC 06743 07694 08412 00391	L = 3.32	CPC 07660 07866 09903 00465	L = 3.33	CPC 07038 07721 08727
ARC 14-120(CA23B)		1109.0000 10000 375.0000	31 0 RN/L	XYCP .34507 .29788 .27463	121 0 FN/L	XYCP .31988 .31778 .29641 00497	37 0 RN/L	XYCP .30737 .31274 .29125 00347	14/ 0 RN/L	XYCP .36126 .36227 .36217	15/ 0 RN/L	XYCP .36879 .31469 .38205
	ATA	XMRP YMRP = ZMRP =	RUN NO. 40	XZCP .05382 .06617 .0799	RUN NO. 40	XZCP .03617 .05275 .05812	RUN NO. 40	XZCP .03037 .04937 .06386	RUN NO. 40	XZCP .01754 .04498 .06009	RUN NO. 40	XZCP .00596 .03698 .0150.
	REFERENCE DATA	2690.0000 SO.FT. 474.8100 IN. 936.6800 IN.		ALPHAC 004 2.318 4.401 GRADIENT		ALPHAC 091 2.490 4.405 GRADIENT		AL PHAC .024 2.449 4.293 GRADIENT		ALPHAC 155 2.568 4.303 GRADIENT		ALPHAC 120 2.563 4.329 GRADIENT
		SREF = 2690. LREF = 474. BREF = 936. SCALE =		02 3.048 3.021 3.274		02 7.066 7.198 7.335		02 9.793 9.766 9.745		02 14.781 14.685 14.592		02 29.804 29.944 29.835

293	. ST		5.000 5.000 .000		10.10 — M	75)		5.000 5.000 5.000		യസയ		∠ ī0 =		2:50 5:10
PAGE	08 OCT		N 11 11 11		CPS2 25685 25205 26571 00178	08 OCT		80 81 81 91 		CPS2 24518 26693 01006		CPS2 25977 26425 00191		CPS2 25335 26251 00407
	(ENHO40) (PARAMETRIC DATA	.000 STAB .000 ELEVON .000 DX .000 MACH		CPS1 20509 . 20594 21273 00139	(ENH041)	PARAMETRIC DATA	.000 STAB .000 ELEVON 4.000 DX .000 MACH		CPS1 20356 21381 00474		CPS1 21139 21406 00113		CP51 20690 21545 00380
		PARA	BETA # RUDDER # 10RB # 4	5.00	CPE3 06824 04899 05435		PAR	H H H H	5.00	CPE3 07149 07866 00332	5.00	CPE3 07753 08239 00207	5.00	CPE3 08099 +.08042
	DATA		BETA RUDDE 10RB DY	-5.00/	CPB3 29692 28010 28517	2 DATA)		BETA RUDOE 10RB DY	-5.00/	CPB3 28054 28391 00151	-5.00/	CPB3 29032 28971 .00026	-5.00/	CPB3 28746 29111 00162
	SI (ORBITER			INTERVAL =	CPB2 30948 29250 29706	SI (ORBITER			INTERVAL	CPB2 29910 29475 .00201	INTERVAL	CP82 30815 30426	INTERVAL	CPB2 29944 30378 00193
	747/1 AT1 0251			GRADIENT	CPB1 27314 25529 26652	747/1 ATI 0251			GRAD I ENT	CPB1 26327 26079 .00115	GRADIENT	CPB1 27141 27007 .00057	GRADIENT	CPB1 25569 26649 00036
- CA23B	14-120(CA23B) 7		IN. XO IN. YO IN. ZO	L = 3.33	CPC 07678 07649 08462 00164	-120(CA238) 7		IN. X0 IN. Y0 IN. 20	/L = 2.97	CPC 08777 09240 00214	1 ≥ 2.96	CPC 09281 09949	/L = 2.98	CPC 09042 09816 00344
SOURCE DATA	ARC 14-12		1 0000.0011 1 0000. 375.0000	06/ 0 RN/L	XYCP . 39356 . 34526 . 33269 01356	ARC 14-18		1109.0000 .0000 375.0000	11/ 0 RN/L	XYCP .30419 .28506	412/ 0 RN/L	XYCP . 29651 . 28545 00474	413/ 0 RN/L	XYCP .37786 .29847 .03526
TABULATED		ATA	XMRP = YMRP = ZMRP =	RUN NO. 4	xZCP .00113 .03055 .04788		ATA	XMRP YMRP # ZMRP #	RUN NO.	X2CP .06328 .07417 .00504	RUN NO.	x2CP .05231 .06501	RUN NO.	XZCP . 04697 . 06158
		REFERENCE DATA	0000 SQ.FT. B100 IN. 6800 IN. 0125		ALPHAC 091 2.446 4.476 GRADIENT		REFERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		ALPHAC 2.137 4.298 GRADIENT		ALPHAC 2.085 4.439 GRADIENT		ALPHAC 2.218 4.469 GRADIENT
DATE 22 MAR 76		-	SREF = 2690.0000 LREF = 474.8100 BREF = 936.6800 SCALE = 0125		02 44.515 44.728 44.671			SREF = 2690.0000 LREF = 474.8100 BREF = 435.6800 SCALE = .0125		02 3.328 3.325		02 6.838 7.184		07. 9.77.0 9.780

13.		5.000 5.000 .000							(27		5.000 5.000 .000 .300				
1 08 OCT		11 U N 11		CPS2 27401 27721 00131		CPS2 26508 26674 00075		CPS2 27272 29230 00926	(08 OCT 7		6 11 H II		CPS2 37252 31341 .02937		CPS2 30007 31262 00610
(ENHO41)	ARAMETRIC DATA	.000 STAB .000 ELEVON .000 DX .000 MACH		CPS1 22357 23671 00536		CPS1 20854 21364 00232		CPS1 21954 1.14666 .64583	(ENHO#2)	PARAMETRIC DATA	.000 STAB .000 ELEVON .000 DX .000 MACH		CPS1 32603 27437 .02567		CPS1 -,26826 -,27170 -,00168
	PARA	A DE R H H H H H H H H H H H H H H H H H H	5.00	CPE3 10265 00001	5.00	CPE3 08168 08253 00039	5.00	CPE3 09998 10810 00384		PARA	AO B B B R II I	5.00	CPE3 20762 15015	5.00	CPE3 -,14274 -,14273 .00001
R DATA)		BETA RUDDEF 10RB DY	-5.00/	CPB3 30907 30732	-5.00/	CPB3 29299 29130	-5.00/	CPB3 30698 31165 00221	R DATA)		BETA RUDDEF 10RB DY	-5.00/	CPB3 41726 35334 .03176	× -5.00/	CP83 -,35046 -,35943 -,00193
O251 (ORBITER			IT INTERVAL	CPB2 32839 32273 .00230	I INTERVAL	CPB2 31148 30611	T INTERVAL	CPB2 32269 32240	O2S1 (ORBITER			T INTERVAL	CPB2 -,43129 -,36655	INTERVAL	CPB2 36195 37344 00413
747/1 AT1 C			GRADIENT	CPB1 28546 28832	GRADIENT	CPB1 27306 27289 .00008	GRADIENT	CPB1 28414 28908 00233	747/1 AT1 0			GRADIENT	CPB1 -,39445 -,33116	GRADIENT	CPB1 31599 33041 00702
14-120(CA23B)		IN. X0 IN. Y0 IN. Z0	RN/L = 2.97	CPC 11052 11987 00381	/L = 2.97	CPC 09328 09842 00234	1 = 2.97	CPC 10640 12065 00673	-120(CA23B)		N. X0 N. X0 N. Z0	ال ≂ 1.99	CPC 22779 17766 .02491	/ 1.98	CPC 16130 17208 00524
ARC 14-1		375.0000	414/ 0 RN	XYCI .28362 .27186 00683	15/ 0 RN/L	XYCP .29887 .28708	416/ 0 RN/L	XYCP .34549 .29554 02361	ARC 14-13		1109,0000 .0000 375.0000	421/ 0 RN/L	XYCP .22071 .21372 00348	22/ 0 RN/L	XYCP .24617 .26880 .01101
)ATA	XMRP YMRP ZMRP	RUN NO.	XZCP .03978 .05719	RUN NO. 4	XZCP .03379 .05125 .00794	RUN NO. 4	x2CP .02968 .04570 .00757		DATA	XMRP YMRP ZMRP	RUN NO. 4	x2CP .06434 .07396 .00478	RUN NO. 42	X2CP .05355 .05308 .06464
	REFERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		ALPHAC 1.986 4.441 GRADIENT		ALPHAC 2.215 4.415 GRADIENT		ALPHAC 2.214 4.330 GRADIENT		REFERENCE D	2690,0000 SQ.FT. 474,8100 IN. 936,6800 IN.		ALPHAC 2.209 4.221 GRADIENT		ALPHAC 2.291 4.347 GRADIENT
		SREF = 2690 LREF = 474 BREF = 936 SCALE =		02 14.789 14.819		DZ 29.638 29.826		02 44.438 44.694			SREF = 2690 LREF = 474 BREF * 936 SCALE =		02 3.128 3.128		D2 7.085 7.303

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RABULATED SOURCE DATA - CA23B
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295	^		5.000 5.000 .000								
PAGE 2	08 OCT 75				CPS2 37222 32218 .02309		CPS2 39283 39280		CPS2 38532 31530 .03332		CPS2 31950 32294 00166
	(ENHO42)	ETRIC DATA	.000 STAB .000 ELEVON 4.000 DX .000 MACH		CPS1 32667 26808 .02704		CPS1 33081 33602 00250		CPS1 32487 27266 .02485		CPS1 26456 27425 00469
	=	PARAMETRIC	# H II II	5.00	CPE3 20227 15101 .02365	5.00	CPE3 -,21113 -,21285 -,00082	5.00	CPE3 20923 14209 .03196	5.00	CPE3 14404 13880 .00254
	R DATA)		BETA RUDDER 10RB 07	-5,00/	CPB3 41603 35322 .02898	+ -5.00/	CPB3 42253 41814 .00210	-5.00/	CPB3 41948 35350 .03141	-5.007	CPB3 35938 35835 .00050
	SI (ORBITER			GRADIENT INTERVAL	CPB2 42741 36741 .02769	INTERVAL	CPB2 -,44262 -,42949 .00629	T INTERVAL	CPB2 43612 36771 .03256	T INTERVAL	CPB2 37356 37074 .00137
	747/1 AT1 02S1 (ORBITER DATA)			GRADIEN	CPB1 38712 33194 .02546	GRADIENT	CPB1 40157 39542 .00294	GRAD1ENT	CP81 38707 33662	GRADIENT	CPB1 33279 33002 .00134
- CA23B			IN. X0	1.98	CPC 22329 17673 .02149	1.98	CPC 23384 24255 00417	יר = 1.97	CPC 22763 17407 .02549	/L = 1.97	CPC 16353 15890 00260
SOURCE DATA	ARC 14-120(CA23B)		1109.0000 1 10000 1 375.0000 1	237 0 RN/L	XYCP .43302 .28081 06885	424/ 0 RN/L	XYCP .24752 .22186 01229	25/ 0 RN/L	XYCP .20992 .22412	4267 0 RN/L	XYCP . 26827 . 36444 . 04660
TABULATED		ATA	XMRP = YMRP = ZMRP	RUN NO. 42	XZCP .04863 .05984 .00517	RUN NO. 4	xZCP .04253 .05591	RUN NO. 42	xzcP .03475 .04968	RUN NO.	XZCP .03084 .04427 .00650
		REFERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		ALPHAC 2.180 4.347 GRADIENT		AL PHAC 2.266 4.354 GRADIENT		ALPHAC 2.191 4.292 GRADIENT		ALPHAC 2.202 4.255 GRADIENT
DATE 22 MAR 76		_	SREF = 2690.0000 LREF = 474.8100 BREF = 936.6800 SCALE = .0125		DZ 9.285 9.970		DZ 14.488 14.575		02 29.804 29.724		20 44.756 44.698

REFERENCE DATA

0251
(CA23B)
4-120
ARC 1

(ENHO43) (09 007 75)

96**2 3**0V3

PARAMETRIC DATA	BETA000 ELEVON . 5.000	GRADIENT INTERVAL = -5.00/ 5.00	CPB1 CPB2 CPB3 CPE3 CPS1 CPS22653926537147751894524639278362644914775189452460923811270362586314645183222541024343278942510262121510419216256242511028605262311542619962257772628430137287991609120425268732628426000026000260002600002600002600002600002600026000002600002600002600002600002600002600002600000260000260000260000260000260000260000260000026000026000026000026000026000026000026000002600002600002600002600002600002600002600000260000260000260000260000260000260000260000	GRADIENT INTERVAL = -5.00/ 5.00	CPB1 CPB2 CPB3 CPE3 CPS1 CPS2253832990225447153172308329447289501561215512178702495024447289572764215512178702495023708259082550815518187582499024563269182590015541185892499024554185182819026518	GRADIENT INTERVAL = -5.00/ 5.00	CPB1 CPB2 CPB3 CPE3 CPS1 CPS2 - 24654 - 27009 - 31183 - 30140 - 17535 - 16946 - 24654 - 25709 - 28059 - 16643 - 15082 - 17113 - 25662 - 27099 - 28025 - 25994 - 15082 - 17113 - 25019 - 281092 - 27299 - 15526 - 19012 - 24982 - 2729 - 26122 - 15259 - 19204 - 25176 - 25585 1.11279 - 27354 - 16575 - 19760 - 26374 - 26983 - 31529 - 29405 - 177999 - 20749 - 26847 - 00294 - 00291 - 00175 - 00387 - 00198
REFERENCE DATA	SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO LREF = 474.8130 IN. YMRP = .0000 IN. YO BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO SCALE = .0125	RUN NO. 431/ 0 RN/L = 3.34 G	DZ ALPHAO XZCP XYCP CPC CPC 2.284 4.518 .00067 .5834305364278 2.235 6.328 .01790 .53109056092.21862 8.269 .03028 .452930561127862 2.332 12.406 .02653 .068930755627862 2.211 14.397 .00000 .00000 .00000	RUN NO. 432/ 0 RN/L = 3.33 GF	DZ ALPHAO XZCP XYCP CPC CPE 17.824729 1.55828 .43360171125 20.582 4.59700122 .511440490422 20.432 6.440 .01690 .438890568823 20.389 8.441 .03012 .344240605523 20.672 10.411 .02902 .254470696624 20.474 14.347 .02665 .125170740225 20.474 14.347 .02705 .107770832926 20.474 14.347 .02705 .107770832926 20.474 14.347 .02705 .107770632926 20.474 14.347 .02705 .107770632926 20.474 14.347 .02705 .10600 .00	RUN NO. 433/ D RN/L = 3.31 GF	D2 ALPHAO XZCP XYC? CPC CPC 37.645608 2.12768 .47241032172740.709 4.48000470 .54379062322640.324 8.438 .02917 .463460596305976 40.577 12.427 .02697 .17547076742640.395 14.433 .02643 .09633089332640.395 .0059306592 .00593 .00593

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	PAGE (09 OCT 7	4	1 NOV		CPS2 25117 26038 26265 27087	00000.	(09 OCT 75				CPS2 23333 23882 25186 25314 25319	00000.	CPS2 23474 23608 24217 24064 25441
	(ENH044)	PARAMETRIC DATA	.000 ELEVON		CPS1 18149 19132 20662 21591		(ENHO45)	PARAMETRIC DATA	.000 ELEVON		CPS1 16927 17806 19157 18200 20014	. 00000	CPS1 16637 17546 17553 1837 18305 18949
		PAR	# ~	5	•	,		PARA	 	c		٥. ٤	•
			BETA	-5.00/	CP83 - 01989 - 02322 - 03176 - 05174 - 05100				BETA	ָבָּר (בְּיִבְּיִר בְּיִבְּיִר בְּיִבְּיִר בְּיִבְּיִר בְּיִבְּיִר בְּיִבְּיִר בְּיִבְּיִר בְּיִבְּיִר בְּיִבְ	CPB3 01133 01062 02860 01991 03288		83 1139 0877 1501 1522 1545 1545 1545
				IT INTERVAL	CPB2 - 01748 - 02162 - 03069 - 04775					INTERVAL =	CP82 00894 01380 02913 01796 01805		CPB2 .00823 .00824 01343 01545 01609
	0351			GRADIENT	CP81 01694 02376 02639 04538 04536	1920				GRADIENT	CP81 00629 00929 00974 01301	GRADIENT	CPB1 00571 00903 01052 01014 01148 011836
TA - CA23B	14-120(CA23B)		IN. 20	RN/L = 3.34	CPC 02927 03875 04332 05723 06476	14-120(GA74)			X	'L = 3.33	CPC 01663 02336 02540 02788 02788 04219	L = 3.31	CPC003860225602427027040265703351
D SOURCE DATA	ARC 14-	000	375.	441/ 0 RN	XYCP +2+53 -51159 -77805 -35734 -87467	ARC 14-13		0	375.0000	451/ 0 RN/L	09005 07983 08408 19476 13388 13322	52/ 0 RN/L	xYCP 09456 04674 01557 10524 12173 13282
TABULATE	DATA	XMRP	YMRP = ZMRP =	RUN NO.	x2CP 05693 02488 01019 00679 00328		DATA	Z OMA	YMRP = ZMRP =	RUN NO. 4	xZCP .08431 .09111 .09360 .09610 .06220 .05317	RUN NO. 45	XZCP .11128 .08120 .09120 .09214 .06233
76	REFERENCE DATA	.0000 SQ.FT	474.8100 IN. 936.6800 IN. .0125		ALPHAO 6.381 8.325 10.419 12.411 14.003 GRADIENT		REFERENCE D	50. F.	z z		AL PHAO 4.557 6.357 8.320 10.373 12.477 14.400 GRADIENT		ALPHAO 792 +.401 6.464 8.465 10.508 12.332 CRADIENT
DATE 22 MAR 71			M H H	ä	07 60.08 60.085 60.657 60.73 60.708			H	LREF = 474.8100 BREF = 936.6800 SCALE = .0125		02 8.631 8.483 8.539 1.921 2.551 9.114		02 17.573 20.373 20.372 20.312 20.516 20.115
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ARC 14-120(CA23B) 0351

(39 001 75)

(ENHOAD)

	000.			_		. 000		
	н		CPS2 - 23204 - 23557 - 24470 - 25151 - 25103 - 25781	09 OCT 75		u		CPS2 - 23024 - 24461 - 24161 - 24761 - 247461 - 24761 - 24321 - 24321
PARAMETRIC DATA	.000 ELEVON		CPS1 - 16370 - 17620 - 19140 - 18309 - 19272 - 19372	(ENHO46)	PARAMETRIC DATA	.000 ELEVON		CPS1 - 15578 - 16452 - 17717 - 17963 - 18403 - 19028 - 19166
PARA	# ⋖	5.00	CPE3 -,1514 -,16156 -,15658 -,15854 -,15540 -,16369 -,16369		PARA	# .	5.00	CPE3 16241 15843 17142 1598 15982 15982 15579 15579
	BETA	= -5.007	CPB3 .01220 r.00700 02621 01364 01661 02952			BETA	-5.00/	CPB327077261872697124183251932519626974
		UT INTERVAL	CPB2 .01220 00569 02181 01312 02397 02397				NT INTERVAL	CPB2 28402 28145 28199 26468 26166 26166 27166
		I GRADIENT	CPB1 .00155 00648 02026 01058 02248 02632	0251			1 GRADIENT	CP81 23977 24150 23229 23202 23320 24190 24190
	N X X X X X X X X X X X X X X X X X X X	RN/L = 3.31	CPC . 00025 01563 03215 02539 02734 03850 04310	ARC 14-120(CA23B)		IN. X0	RN/L = 3.3	CPC
	1109.0000 .0000 375.0000	+53/ 0 RI	xYCP 05613 05982 05426 07923 13229 19287	ARC 14-		1109.0000 .0000 375.0000	461/0 Rt	XYCP .25407 .25578 .21086 .17894 .07883 .01145
DATA	XMRP XMRP ZMRP ==	RUN NO.	XZCP .11488 .08207 .07862 .09158 .08286 .06253		DATA	XMRP YMRP	RUN NO.	x2CP - 25307 - 25559 - 22559 - 15820 - 14357 - 12230 - 69400 - 69400 - 69538
REFERENCE DAT	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN. .0125		ALPHAO 738 +.411 6.397 8.474 10.464 12.438 14.497 0RADIENT		REFERENCE DATA	936.6800 IN. 936.6800 IN.		ALPHAO 234 2.253 4.464 6.466 10.328 10.328 12.418 12.418 14.328 6RADIENT
	SREF = 2690 LREF = 474 BREF = 936 SCALE =		02 37,990 40,220 39,923 40,425 40,425 40,404			SREF = 2690. LREF = 474. BREF = 936. SCALE =		02 38.822 40.088 40.254 40.254 40.159 40.291 33.934

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PAGE 299	(ENH047) (21 OCT 75)	PARAMETRIC DATA
TABULATED SOURCE DATA - CA238	ARC 1+ 120(CA238) 0251	F DATA
DATE 22 MAR 76		BEFFERENCE DATA

)	•		. 000										
- 25	21 OCT 75		N		CPS2 24593 25477 .00000		CPS2 23978 25414 .00000		CPS2 24197 24799 .00000		CPS2 24875 24430 .00000		CPS2 22649 24614 .00000
	(ENH047) (PARAMETRIC DATA	.000 ELEVON		CPS1 17447 19782 .00000		CPS1 17169 18253 .00000		CPS1 17785 18392 .00000		CPS1 17941 18312 .00000		CPS1 16867 17763 .00000
		PARA	# H	5.00	CPE3 16045 17117 .00000	5.00	CPE3 14952 15030	5.00	CPE3 15331 15850 .00000	5.00	CPE3 15986 15027	5.00	CPE3 -,15231 -,15188 .00000
			BET, 02	-5.00/	CPB3 25519 26260	-5.007	CP83 24928 24255 .00000	-5.00/	CPB3 24725 24932	/00°5- =	CPB3 25475 24113 00000	-5.00/	CPB3 24814 24428 .00000
				GRADIENT INTERVAL *	CPB2 26631 27305 .00000	INTERVAL =	CPB2 26248 25837 .00000	INTERVAL	CPB2 26018 26017 .00000	INTERVAL	CPB2 27091 25358 .00000	I INTERVAL	CPB2 26345 26047 .00000
	0251			GRADIENT	CPB1 23296 24275 .00000	GRADIENT	CPB1 22342 22481 .00000	GRADIENT	CPB1 22641 22999	GRADIENT	CPB1 23285 22709	GRADIENT	CPB1 23045 22888
- CA23B			IN. XO IN. YO IN. ZO	L = 3.32	CPC 05009 07477	L = 3.32	CPC 04159 05570	1 = 3.31	CPC 04564 05498	1 = 3.31	CPC 05429 05491	RN/L = 3.30	CPC 04618 05868 .00000
SOURCE DATA	ARC 1+ 120(CA23B)		1109.0000 10000 375.0000	71/ D RN/L	XYCP . 27375 . 05985 . 00000	72/ 0 RN/L	XYCP . 28943 . 06256	73/ 0 RN/L	XYCP . 25637 . 38468 . 00000	474/ 0 RN/L	XYCP .24391 .06264	475/ 0 RN	XYCP . 24.322 .04625
TABULATED		ATA	XMRP YMRP IMRP	RUN NO.	xZCP .16667 .11902	RUN NO. 4	x2cP .15674 .12146	RUN NO. 4	XZCP .16811 .12260	RUN NO.	XZCP .17430 .11973	RUN NO.	xZCP .17307 .12036 .00000
		REFERENCE DATA	.0000 SQ.FT. .8100 IN. .6800 IN.		ALPHAO 6.055 10.519 GRADIENT		ALPHAO 5.995 10.412 GRADIENT		ALPHAO 5.974 10.420 GRADIENT		ALPHAO 5.891 10.503 GRADIENT		AL PHAO 5.884 10.481 GRADIENT
DATE 22 MAR 76		-	SREF = 2690.0000 9 LREF = 474.8100 BREF = 936.6800 SCALE = .0125		XO 6∳0 51⊆.		DX 4.734 5.194		DX 9.687 10.187		DX 14.701 15.158		DX 19.661 20.118

		00						
PAGE 300		000°		CPS2 23584 25246 .00000		CPS2 24852 24181		CPS2 24092 24231 .00000
(ENH048)	PARAMETRIC DATA	.000 ELEVON		CPS1 -,17652 -,18999 .00000		CPS1 18254 18011 .00000		CPS1 17324 18306 .00000
	PARA	N N	5.00	CPE3 14369 16086	5.00	CPE3 -,15531 -,14966 .00000	5.00	CPE3 -,15360 -,15131
		BETA DZ	-5.00/	CPB3 24828 25745 .00000	-5.00/	CPB3 26134 24896 .00000	-5.00/	CPB3 25579 24602 .00000
			GRADIENT INTERVAL =	CPB2 26364 27372 .00000	INTERVAL =	CP82 27601 26051	GRADIENT INTERVAL *	CP82 -,26667 -,25660 .00000
1520			GRADIENT	CPB1 22683 24091	GRADIENT	CPB1 24406 22778 00000	GRADIENT	CPB1 23243 22618
		NNN 2000 24.X 2000	3.30	CPC 04412 07082	3.31	CPC 06105 05909 .00000	L = 3.32	CPC -,05088 -,05475 -,00000
TABULATED SOURCE DATA - CA238		375.0000 II	481/ 0 RN/L =	XYCP .22056 .03924	4821 0 RN/L	XYCP .22880 .06451	483/ 0 RN/L	XYCP .23508 .08371
TABULATED	ATA	XMRP YMRP 2MRP	RUN NO. 48	XZCP 16760 11846 00000	RUN NO. 48	XZCP .17275 .12090 .00000	RUN NO. 46	xZCP .17397 .12157
10	REFERENCE DATA	2690,0000 SQ.FT. 474.8100 IN. 936.6800 IN.		ALPHAO 6.062 10.557 GRAD1ENT		AL PHAO 5.859 10.488 GRADIENT		ALPHAO 5.908 10.472 GRADIENT
DATE 22 MAR 76		SREF = 2690. LREF = 474. BREF = 936. SCALE = .		00 990 1949.		DX 4.719 5.154		DX 9.696 10.116

CPS2 -.23614 -.23818

CPS1 -.17752 -.18230 .00000

CPE3 -.15020 -.14813 .00000

CPB3 -.25364 -.24242 -.00000

CPB2 -.26558 -.25619

CPB1 -.22686 -.23103

CPC -.04330 -.05595

XYCP .21781 .04044 .00000

XZCP .17331 .12102

ALPHAO 5.858 10.427 GRADIENT

DX 19.772 20.191

CPS2 -.24431 -.24815 .00000

CPS1 -.18099 -.18802

CPE3 -.15822 -.15252 .00000

CPB3 -.25974 -.25001

CPB2 -.27309 -.26272

CPB1 +.23803 -.23067 .00000

CPC -.05409 -.05954 -.00000

XYCP .20754 .05952 .00000

XZCP .16718 .12255 .00000

ALPHAO 6.043 10.416 GRADIENT

DX 14.663 15.113

-5.00/

GRADIENT INTERVAL

RUN NO. 484/ 0 RN/L = 3.31

5.00

-5.00/

GRADIENT INTERVAL

RUN NO. 485/ 0 RN/L = 3.31

301	15)		5.000 5.000 .600		CBL .00034 .00107 .00117		CBL .00047 .00075 .00047		CBL .00021 .00088 .00088		CBL .00005 .00029 .00073		CBL .00085 .00047 .00086	
PAGE	(17 OCT	DATA	AB EVON # CH #		CYN 00174 00274 00295		CYN 00214 0022 0002		CYN 00207 00209 00197		CYN 00228 00185 00207		CYN 00222 00243 00243	
	(800HND)	PARAMETRIC DA	. 000 ST. . 000 ELL 6. 000 DX		CY .00648 .01110 .01482		CY .00761 .01125 .01507		CY .00729 .01057 .01365		CY .00794 .01022 .01438		CY .00697 .01108 .01527	
		ď	BETA * RUDOER * 10RB * DY		CLM . 24172 . 20409 . 16651 01880		CLM . 22839 . 18537 . 14789		CLM .21582 .17305 .13832 01938		CLM .19656 .15255 .11935		CLM .17065 .12922 .09164	
	(CARRIER DATA)		## - C	30/ 5.00	CD . 04286 . 04422 . 04876 . 00148	00/ 2.00	CD .04387 .0567 .05043	.00/ 5.00	CD .04463 .05106 .05106	00/ 2.00	CD .04521 .04695 .05221	.00/ 5.00	CD .04525 .04731 .05296	
	0251			NAL = -5.00/	CL 13324 .02518 .18685 .08002	ii i	CL 12157 .04296 .20284 .08110	ıı .	CL 11037 .05366 .20976 .08003	INTERVAL = -5.	CL 09979 .06599 .22600 .08145	INTERVAL = -5	CL 08088 .09308 .24997 .08271	
.	747/1 AT1			GRADIENT INTERVAL	DY 18918 .10106 .18983	GRADIENT INTERVAL	DY 36797 31915 46731 984	GRADIENT INTERVAL	DY 53535 47390 41868	GRADIENT INTE	07 47798 34585 40137	GRADIENT INT	DY -,40582 -,33416 -,40864 -,00070	
DATA - CA238	14-120(CA23B)		00 IN. XC 00 IN. YC 00 IN ZC	3.34 GR	0X .67175 05416 18680	3.35 GR	DX 09481 01120 05854	3.35 GF	DX 15116 -03752 02591	3.35 6	00369 	3.35	DX -,09209 -,00780 -,10720	
SOURCE	ARC 1		1339,9000 0000. 190,7500	RN/L =	MACH .59057 .58914 .59028	RN/L =	MACH .58987 .58902 .59118	RN/L =	MACH .59202 .59301 .59058	RN/L *	MACH . 59255 . 59219 . 59101	RN/L =	MACH .59159 .59155 .59167	;
TABULATED		E DATA	FT. XMRP YMRP ZMRP		1088 6.00000 6.00000 6.00000		1088 6.00000 6.00000 6.00000		10RB 6.00000 6.00000 6.00000		1088 6,00000 6,00000 6,00000		10RB 6.00000 6.00000 6.00000)
MAR 76		REFERENCE DAT	5500.0000 SQ.F. 327.7800 IN. 2348.0400 IN.		3.500 ALPHAC .000 2.000 H.000 GRADIENT		7.500 ALPHAC .000 2.000 4.000 GRAD!ENT		10.000 ALPHAC .000 2.000 4.000 GRADIENT		15.000 ALPHAC .000 2.000 4.000 GRADIENT		30.000 ALPHAC .000 2.000 4.000	CANCELL'S
DATE 22 MAR			SREF = 5E LREF = 3E BREF = 23		= 20		2 0		• ZQ		20		* Z0	

30 5 36	175)		5.000 5.000 .600		CBI .00065 .00075 .00091		CBL .00034 .00092 .00122	175)		-1.000 5.000 .000		CBL .00008 .00058 .00017
PAGE	9) (17.00	DATA	STAB = ELEVON = DX =		CYN 00247 00229 00221		CYN 00245 00232 00238	100 (1) (6	DATA	STAB = ELEVON = DX =		CYN -,00219 -,00198 -,00198
	(UNH00B)	PARAMETRIC	000 000 000 000 000		CY .00825 .01196 .01426		CY .00832 .01181 .01534	600HNO)	PARAME TR 1C	000.8		CY .00780 .01033 .01208
			BETA = RUDDER = 10RB = DY		CLM . 15933 . 11645 . 07873		CLM . 15537 . 11426 . 07472			BETA TOUDDER TOUB TOURS TOURS		CLM . 29583 . 26084 . 23202 01595
	O251 (CARRIER DATA)			-5.00/ 5.00	CD . 04521 . 04761 . 05364	.00/ 5.00	CD . 04572 . 04759 . 05360	CARRIER DATA			-5.00/ 5.00	CD .03997 .04168 .04516
	AT1 0251 (CA			ı	CL 07383 .10578 .27128	ıı K	CL 05979 10559 27450	ATI O251 (CAI			INTERVAL = -5	CL 16424 .00497 .16102
CA23B	747/1			GRADIENT INTERVAL	07 -,47401 -,48236 -,52115 -,01178	GRADIENT INTERVAL	7 53060 45502 48963 01024	747/1			GRADIENT INT	07 28840 5982 58163 07331
DATA -	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.34	0x 07540 .00616 16935 02349	3.33	0x .04229 15767 20162	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.34	DX -1.54849 75094 .01750
TABULATED SOURCE	ARC		# 1339. # 190.	RN/L .	MACH . 59230 . 59224 . 59245	RN/L .	MACH .59329 .59239 .59204 00031	ARC		1339	RN/L =	МАСН . 58956 . 59001 . 59111
TABUL		REFERENCE DATA	SG.FT. XMRP IN. YMRP IN. ZMRP		1088 6.00000 6.00000 6.00000		1088 6.00000 6.00000 6.00000		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP		1088 8.00000 8.00000 9.00000
22 MAR 76		REFEREN	5500.0000 SQ 327.7800 IN 2348.0400 IN		= 45.000 ALFHAC .000 2.000 H.000 GRADIENT		* 50.000 ALPHAC .000 Z.000 4.000 GRADIENT		REFEREN	5500.0000 SQ 327.7800 IN 2348.0400 IN		= 3.500 ALPHAC .000 2.000 4.000 GRADIENT
DATE 22			SREF # LREF # BREF # SCALE #		20		20			SREF LREF BREF SCALE		Z0

DATE 22	MAR 76		TABULAT	TABULATED SOURCE D	DATA - CA23B	œ					PAGE	303
				ARC 14	14-120(CA23B)	1 747/1 ATI	1 02SI (CARRIER	RIER DATA)		(600HNO)) (17 OCT	1. 57
		REFERENCE DAT	E DATA						PA	PARAMETRIC	DATA	
SREF = LREF = BREF = SCALE =	5500. 327. 2348.	5500.0000 SQ. 327.7800 IN. 2348.0400 IN.	FT. XMRP YMRP ZMRP	= 1339,9000 = .0000 = 190,7500	00 IN. XC 00 IN. YC 00 IN ZC				BETA = RUDDER = 10RB = 07	8.000 0000 0000	STAB = ELEVON = DX = MACH =	-1.000 5.000 .000
				RN/L =	3.35 GR	GRADIENT INTERVAL		00/ 5.00				
20	, 7 , 4	7.500 ALPHAC .000 2.000 4.000 GRADIENT	1088 8.00000 8.00000 8.00000	MACH .58981 .59113 .59117	DX -2,01103 -,37391 -,02504	DY -,46973 -,49652 -,53884 -,1729	CL 15009 .01433 .17324 .08083	CD . 04136 . 04260 . 04686	CLM .27560 .23922 .20636	CY .00823 .01027 .01282	CYN 00251 00238 00217	CB! .00025 .00080 .00057
				RN/L =	3.35 GR	GRADIENT INTE	ERVAL = -5.(.00/ 5.00				
20	. 10 	10.000 ALPHAC .000 2.000 4.000 GRADIENT	10RB 8.00000 8.00000 9.00000	MACH .59127 .59204 .59073	0X 07935 05658 05430 .00526	DY 48612 43816 53020	CL 13803 .01892 .18116 .07980	CD . 04244 . 04301 . 04799	CLM .25524 .22558 .18959	CY . 00603 . 01046 . 01359	CYN 00222 00255 00035	CBL .00065 .00102 .00087
				RN/L =	3.35 GR	GRADIENT INTE	INTERVAL = -5.	00/ 5.00				
ZO	* R. R.	15.000 ALPHAC .000 2.000 4.000 GRADIENT	10R8 8.00000 8.00000 8.00000	MACH .59244 .59188 .59315	DX 18171 91052 01053	DY 39780 46944 53470	CL 12336 .03663 .19560	CD .04334 .04485 .04976	CLM .23252 .20017 .16279 01743	CY .00598 .00958 .01332	CYN 00215 00236 00222	CBL . 00094 . 00098 . 00010
				RN/L =	3.35 68	GRADIENT INTE	INTERVAL = -5.	.00/ 5.00				
20	30 88	30.000 ALPHAC .000 2.000 4.000 GRADIENT	8 . 00000 8 . 00000 8 . 00000	MACH . 59222 . 59285 . 59137	DX 13688 10129 13779 00023	07 F2196 42881 53052 00214	CL 08845 .07165 .23292	CD .04494 .04651 .05213	CLM .19136 .15507 .11825 01828	CY .00682 .01125 .01600	CYN 00224 00256 00278	CBL . 00058 . 00103 . 00122
				# 7/N&	3.34 GF	GRADIENT INTE	INTERVAL = -5.	00/ 2.00				
20	€ 45 RB	45.000 ALPHAC .000 2.000 4.000 GRADIENT	1088 8.00000 8.00000 000000	MACH .59197 .59243 .59178 00005	DX 04 829 05417 55068 02560	07 -, 55849 -, 45491 -, 45507	CL -, 08292 . 08516 . 25582	00 .04496 .05566 .05591	CLM 17571 13653 09671 - 01975	CY .00684 .01028 .01489	CYN -,00225 -,00219 -,00242	CBL . 00058 . 00107 . 00102

DATE 22 MAR 76	TABULA	TABULATED SOURCE	DATA - CA23B	B 747/1 AT1	0251	(CARRIER DATA)		(600HN))	PACT () ()	304
REFEREI	REFERENCE DATA							PARAMETR1C	DATA	
SREF = 5500.0000 SQ LREF = 327.7800 IN BREF = 2348.0400 IN SCALE = .0125	SQ.FT. XMRP IN. YMRP IN. ZMRP	. 1339.90 .00 . 190.75	9000 IN. XC 0000 IN. YC 7500 IN ZC				BETA RUDDER		STAB = ELEVON = DX =	000. 000. 000.
		RN/L *	3.33 GR/	GRADIENT INTERVAL		-5.00/ 5.00				
DZ = 50.000 ALPHAC .000 2.000 4.000 GRADIENT	10RB 8.00000 8.00000 8.00000	MACH . 59188 . 59167 . 59268	DX 00194 . 01316 09422 02307	07 52363 488192 46192	CL - 07192 - 09602 - 26545 - 08434	CD . 04549 . 04728 . 05304 . 00189	CLM .16922 .12927 .09073	CY 00871 01129 01531 00165	CYN 00255 00247	CBI . 00016 . 00041 . 00088
		ARC 1	14-120(CA 23B)	747/1 AT!	0251	(CARRIER DATA)		(UNHO I O	0) (17 OCT	175)
REFEREN	REFERENCE DATA						u	PARAME TR 1C	DATA	
SREF = 5500,0000 SQ LREF = 327,7800 IN BREF = 2348,0400 IN SCALE = .0125	SQ.FT. XMRP IN. YMRP IN. ZMRP	1339.90 .00 190.75	9000 IN. XC 0000 IN. YC 7500 IN ZC				BETA # RUDDER # 10RB # DY	000 000 000 000 000	STAB = ELEVON = DX = MACH =	5.000 5.000 .000
		RN/L =	3.33 GRA	GRADIENT INTERVAL		-5.00/ 5.00				
DZ = 3.500 ALPHAC .000 2.000 4.000 GRADIENT	1088 8.00000 8.00000 8.00000	MACH .59528 .59463 .59120	DX 14459 03459 02236	DY .39993 .71214 .67475	CL 06378 .07974 .23994 .07593	.04118 .04386 .04969	CLM 02598 05547 09160	CY. .01246 .01326 .01450	CYN 00417 00346 00308	CBL .00031 00012 .00079
		RN/L =	3.32 GRA	GRADIENT INTERVAL	11	-5.00/ 5.00				
DZ = 7.500 ALPHAC .000 2.000 4.000 GRADIENT	10RB 8.00000 8.00000 8.00000	MACH .59524 .59624 .59500	0X 13105 03201 05084 .02005	D* N8072 1391 13091 05291	CL 05554 .09815 .25924 .07869	CD . 04245 . 04523 . 05194 . 00237	CLM 04964 08196 12041	CY . 01097 . 01350 . 01501	CYN 00327 00283 00283	CBL . 00022 . 00025 . 00084

305	ŗ)	5.000 .000 .000	3	CBI .00022 .00052 .00101		CBL .00004 .00044		CBL .00032 .00030 .00061		CBL .00027 .00051 .00047		CR_ . 00043 . 00052 . 00077
PAGE	7.	ATA	STAB = ELEVON = DX = HACH = HA		CYN -,00265 -,00307 -,00265		CYN 00269 00284 00249		CYN 00279 00308 00296		CYN 00280 00297 00281		CYN 00290 00289
	(ONHO) O)	PARAMETRIC)		CY . 00993 . 01402 . 01567		CY .01034 .01228 .01431		CY .01046 .01298 .01449		CY .00984 .01276 .01445		. 01014 . 01190 . 01437
			BETA RUDDER RIORB ROY		CLM 06417 09904 13906 01872		CLM 09211 12875 16972		CLM 14215 18458 22148		CLM -,16648 -,20981 -,24408		CLM 17103 21515 24982
	(CARRIER DATA)			-5.00/ 5.00	CD . 04323 . 04615 . 05350	.00/ 5.00	00 04430 04746 05536 05536	.00/ 5.00	.04508 .04956 .05833	.00/ 5.00	CD .05046 .05034 .05055 .00365	.00/ 5.00	CD .04551 .05052 .06024
	AT1 0251 (CA			INTERVAL = -5	ct 05202 .11025 .27228 .08107	NTERVAL = -5	. 03026 . 12909 . 29072 . 08025	INTERVAL = -5.	CL .00478 .17045 .33194 .08179	£ .5	CL . 02641 . 19329 . 35651 . 08252	NTERVAL = -5.	CL . 02692 . 19668 . 36493 . 08450
38	747/1			GRADIENT INT	DY -,40700 -,20185 -,29551	GRADIENT INT	DY 36917 40978 10105	GRADIENT INTE	DY 51761 47056 46531	GRADIENT INTERVAL	DY -, 43686 -, 42721 -, 47170 -, 30871	GRADIENT INTE	DY 44117 18167 53064 02237
DATA - CA23B	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.32	0x 14457 02622 07409	3.32 G	0x 13299 02739 07079	3.33 GF	0X 10394 09296 11834 00360	3.33 GF	0x 10371 10516 19518	3.32 GF	DX 01092 00946 12097
TABULATED SOURCE	ARC		= 1339. = 190.	RN/L =	MACH . 59458 . 59782 . 59922	RN/L =	MACH . 59642 . 59651 . 59752	RN/L =	MACH . 59671 . 59659 . 59605	RN/L =	MACH .59578 .59641 .59539	RN/L =	MACH . 59362 . 59473 . 59456
TABU		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP		10R8 8.00000 8.00000 8.00000		8.00000 8.00000 8.00000 8.00000		10A8 8.00000 8.00000 9.00000		10RB 8.00300 8.00330 9.00000		1088 8.00000 8.00000 8.00000
3, 84.		REFERE	5500,0000 SO 327,7800 IN 2348,0400 IN		10.000 ALPHAC .000 2.000 4.000 GRADIENT		15.000 ALPHAC .000 2.000 4.000 GRADIENT		30.000 ALPHAC .000 2.000 4.000 GRADIENT		45.000 ALPHAC .000 2.000 4.000 GRADIENT		50.000 ALPHAC .000 2.000 4.000 GRADIENT
DATE 22 H			SREF LACF = BREF = SCALE =				" Zq		. 20		* 20		z 20

TABULATED SOURCE DATA - CA238

ARC 14-120(CA238) 747/1 ATI 02SI (CARRIER DATA)

(UNH011) (17 0C) 75)

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	000 000 600 600		.BI 00032 00065	00084 00013		۳	00057 00051 00069 00003		iBi. 00018 00046 00042 00006		CBL .00011 .00103 .00103		CBL .00050 .00094 .00082	8000
	1- 0.0.		800	9.9.		J			8		00000		8000	0.
DATA	STAB ** ELEVON # DX MACH #			00187		N C	00194 00194 00206 00003		CYN 00212 00212 00212		CYN 00259 00223 00217		CYN 00220 00199	00001
PARAMETRIC	0000.		CY .00775 .01195	.01539		Շ	.00846 .01201 .01622		CY .00920 .01232 .01593		CY .01037 .01276 .01597		CY .00858 .01176	.00187
	BETA = RUDDER = 10RB = 0Y		CLM . 18472 . 14649	.10785		P. P.	.17388 .13740 .09777		CLM .17388 .13410 .09517		CLM . 16412 . 12544 . 08671 01935		CLM .14906 .10958 .06954	01988
		.007 5.00	CD .04587 .04706	.05169	.00/ 5.00	8	.04603 .04752 .05238 .00159	.00/ 5.00	CD .04636 .04758 .05285	.00/ 5.00	. 04664 . 04757 . 05297 . 00158	.00/ 5.00	CD .04602 .04779	.00190
		INTERVAL = -5	CL 09301 071 <i>22</i>	. 2 33 26 . 08157	# P	ا ا	07425 .08761 .24632 .08014	INTERVAL = -5.	ct 06818 .09273 .25051	INTERVAL = -5.	CL 06555 .09799 .25910	INTERVAL = -5.	CL 04699 .11953 .28564	.08316
		GRADIENT INT	DY 17585 18204	19776 00548	GRADIENT INTERVAL	Δ.	11285 22680 22635 02837	GRADIENT INT	DY 15718 23642 24334	GRADIENT INT	DY 15853 23552 20103	GRADIENT INTE	DY 15001 23890 23699	01924
	9000 IN. XC 0000 IN. YC 7500 IN ZC	3.34	03266	08058 .00357	3.35 6	XO	. 10724 . 10724 . 00587 . 05340	3.35 6	DX 14626 .07409 .01922	3.35 6	DX -, 12417 -, 01486 -, 13120 -, 00176	3.35 6	0X 13025 13397 12946	. 00020
	1339.	RN/L =	MACH . 59330 . 59263	95000	RN/L *	MACH	.59178 .59278 .59253 00039	RN/L =	MACH .59257 .59162 .59123	RN/L .	MACH .59363 .59363 .59510 .00037	RN/L =	MACH .59535 .59468 .59468	00036
REFERENCE DATA	1. FT. XMRP 1. YMRP 1. ZMRP		10RB 4.00000 4.00000	00000.		1088	000000		10RB 4.00000 4.00000 7.00000		10RB 4.00000 4.00000 4.00000		10088 4.00000 4.00000	מחחחה.
REFEREN	5500.0000 SO 327.7800 IN 2348.0400 IN		3.500 ALPHAC .000 2.000	GRADIENT		7.500 ALPHAC	2.000 4.000 GRADIENT		10.000 ALPHAC .000 2.000 4.000 GRADIENT		15.000 ALPHAC .000 2.000 4.000 GRADIENT		30.000 ALPHAC .000 2.000 4.000	מאשטונים:
	H H H H		н						•		u		R	
	SREF LREF BREF SCALE		20			20			20		20		07	

307	75)		5.000 5.000 .600		CBi . 00028 . 00059 . 00099		CBL .00018 .00054 .00121	15)		5.000 5.000 .000 .600		CBL .00003 .00016 .00047
PAGE	(17 OCT	DATA	STAB # ELEVON # DX # MACH #		CYN 00215 00211 00221		CYN 00224 00218 00222	100 71 001	DATA	STAB # ELEVON # DX MACH #		CYN 00059 00094 00076
	(UNHO11)	PARAMETRIC D	0000.		CY .00856 .01577 .01596		CY .00895 .01333 .01601	(CUNH013)	PARAMETRIC [000000		CY .00615 .01033 .01180
		u.	BETA = RUDDER = 10RB = DY		CLM .14192 .09964 .06114		CLM .13949 .09646 .05875		_	BETA ** RUDDER ** TORB ** DY		CLM - 08317 - 12749 - 16135 - 01955
	(CARRIER DATA)			-5.00/ 5.00	.04584 .04743 .05365	.007 5.00	CD .04580 .04723 .05355	(CARRIER DATA)			5.00/ 5.00	CD . 04435 . 04773 . 05512
	AT1 0251 (CAF			INTERVAL = -5.	CL 03035 .13812 .30356 .083+8	1.	CL 02678 .14387 .30852 .08383	AT1 0251 (CA			"	CL 04350 -11796 -27616 -07992
œ	747/1			GRADIENT INTE	07 - 23397 - 28003 - 65959	GRADIENT INTERVAL	07 25594 29421 20810	1/44			GRADIENT INTERVAL	DY 52888 45886 53850 00240
RCE DATA - CA23B	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.34 68	0X -,07470 -,21255 -,14676	3.33 66	DX 06283 24187 17550 02817	ARC 14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.33 G	0x 02265 03416 06456
TABULATED SOURCE	ARC 1		1339.	RN/L =	HACH .59326 .59326 .59371	RN/L =	MACH . 59237 . 59276 . 59289	ARC		= 1339. = 190.	RN/L =	MACH . 59330 . 59492 . 59380
TABUL		CE DATA	YARP YARP		10RB 4.00000 4.00000 4.00000		10RB 4.00000 4.00000 7.00000		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP		10RB 6.00000 6.00000
1R 76		REFERENCE DATA	5500,0000 SQ.F 327,7800 IN. 2348,0400 IN.		45.000 ALPHAC 0000 2.000 4.000 GRADIENT		50.000 ALPHAC .000 2.000 4.000 GRADIENT		REFEREN	5500.0000 SQ 327.7800 IN 2348.0400 IN		3.500 ALPHAC .000 2.000 4.000 GRADIENT
DATE 22 MAR			SREF = 5 LREF = 5 SCALE = 6		* Z0		20			SREF # LREF # BREF # SCALE #		20

TABULATED SOURCE DATA - CA23B

308 June

175)		5.000 5.000 .000		CBI . 00009 . 00050 . 00071		CBL . 00037 . 00030 . 00041 . 00001		CBL 00027 .00032 .00044 .00018		CBL .00010 .00023 .00067		CBL . 00027 . 00008 . 00068
3) (17 00	DATA	STAB # ELEVON # DX # MACH #		CYN - 00081 - 00073 - 00062		CYN 00107 00079 00073		CYN 00138 00093 00093		CYN 00221 00210 0022		CYN -,00233 -,00233 -,00239 -,00031
CUNHOL	PARAMETR1C	6.000 6.000		CY . 00588 . 01098 . 0103		. 00745 . 00889 . 01119		. 00890 . 00841 . 01151		. 01003 . 01142 . 01406 . 00101		CY .00921 .01174 .01399
		BETA # RUDDER = 10R8 = DY		CLM 10496 14824 18280		CLM 11678 15923 19389		CLM 13630 17914 21226 01899		CLM 17026 21182 24339		CLM 18376 255619 25752
(CARRIER DATA)			.00/ 5.00	.04519 .04880 .05690 .05693	00/ 5.00	CD . 04541 . 04936 . 05746	00/ 5.00	CD . 04596 . 05016 . 05858	.00/ 5.00	CD . 04617 . 05111 . 06020	00/ 5.00	CD . 04605 . 05144 . 06099
AT1 0251 (CAF			INTERVAL = -5.	. 02942 . 13008 . 29248	INTERVAL = -5.	CL 02384 -14075 :30175 .08140	ERVAL = -5.	Ct. 01132 .15003 .31481	INTERVAL = -5.	CL . 01950 . 18280 . 34221 . 08068	INTERVAL = -5.	CL .03225 .20242 .36367 .08286
1/247			GRADIENT INTE	DY -,42355 -,49988 -,51321 -,6242	GRADIENT INTE	DY 44808 59846 03759	GRADIENT INTE	07 47005 52853 01462	RADIENT INTE	0). -, L5772 -, 53834 -, 50667 -, 01224	GRADIENT INTE	0Y 53810 53705 55385 00394
14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.32 GF	03294 03294 03940	3,32 GR	DX 18620 00336 07451	3.32 GR	00 09841 0.09841 0.01302	3.33 GR	0x 13369 08049 08049	3.33 GR	0X - 01960 - 05543 - 08046 - 1552
ARC 1		1339.90 . 00 . 190.75	RN/L =	MACH . 59143 . 59273 . 00022	RN/L *	MACH .59144 .59173 .59203	RN/L =	MACH .59111 .59100 .59097	RN/L =	MACH .59008 .59033 .59054	RN/L	MACH .59017 .59079 .59103
	E DATA	FT. XMRP YMRP ZMRP		10RB 6.00000 6.00000 6.00000		10R8 6.00000 6.00000 6.00000		10RB 6.00000 6.00000 6.00000		10RB 6.00000 6.00000 6.00000		10RB 6.00000 6.00000 6.00000
	REFERENCE DATA	5500.0000 SQ. 327.7800 IN. 2348.0400 IN.		7.500 ALPHAC .000 2.000 4.000 GRAO1ENT		10.000 ALPHAC .000 2.000 4.000 GRADIENT		15.000 ALPHAC .000 2.000 4.000 GRADIENT		30.000 ALPHAC .000 2.000 4.000 GRADIENT		45.000 ALPHAC .000 2.000 4.000 GRADIENT
		H & N H		Ħ		н		H		N		•
		SREF LREF BREF SCALE		. 20		07		20		20		20

309	ر 75		5.000 5.000 .000 .600		CBI . 00046 . 00071 . 00097	1 22 1		5.000 .000. .000. .600		CBL . 00008 . 00033 . 00036		CBL . 00011 . 00018 . 00010
PAGE	(17 001	DATA	STAB = ELEVON = DX = MACH =		CYN 00234 00243 0002	100 (17 001	DATA	STAB = ELEVON = DX = MACH =		CYN 00197 00184 00003		CYN 00203 00202 00193
	(UNH013)	PARAMETRIC !	0000.		CY .00942 .01157 .01426	(UNHOZO)	PARAMETR1C	0000.		CY .01045 .01206 .01492		CY .01038 .01260 .01508
		•	BETA = RUDDER = 10RB = DY		CLM 18689 23087 26183			BETA * RUDDER = 10RB = 0Y		CLM 20503 23967 26602		CLM 20700 24616 27383
	(CARRIER DATA)			-5.00/ 5.00	. 04591 . 05134 . 05134 . 06104	0251 (CARRIER DATA)			-5.00/ 5.00	CD .04758 .05226 .06103	-5.00/ 5.00	CD .04748 .05250 .06176
	0251			н	CL .03247 .20588 .37098 .08463	AT1 0251 (CA			и	CL .00661 .16992 .33031	*	CL .01624 .17549 .34323 .08275
Ø	747/1 ATI			GRADIENT INTERVAL	07 - 48797 - 52602 - 56621 - 01956	1/41/1			GRADIENT INTERVAL	07 26345 45158 29278	GRADIENT INTERVAL	0; -,44775 -,37930 -,36577 02049
DATA - CA23B	14-120(CA23B)		00 IN. XC 00 IN. YC 100 IN ZC	3.32 GR	0x .02183 18551 18359	14-120(CA23B)		000 IN. XC 000 IN. YC 500 IN ZC	3.32 6	0X 05223 02453 08535	3.32 6	DX 10972 06173 06510
TABULATED SOURCE DATA	ARC 1		1339.9000 - 00000 - 190.7500	RN/L =	MACH .59036 .59152 .59141	ARC 1		1339.9000 0000 190.7500	RN/L =	MACH .58802 .58859 .58835	RN/L *	MACH .58707 .58741 .58730
TABUL		SE DATA	YMRP YMRP ZMRP		10RB 6.00000 6.00000 6.00000		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP		00000. 4,000000. 000000. 000000.		1.00000 4.00000 4.00000 0.30000
22 MAR 76		REFERENCE DATA	5500,0000 SQ.F 327,7800 IN. 2348,0400 IN.		50.000 ALPHAC .000 2.000 4.000 GRADIENT		REFEREN	5500.0000 Sa. 327.7800 IN. 2348.0400 IN.		3.500 ALPHAC .000 2.000 4.000 GRADIENT		7.500 ALPHAC .000 2.000 4.000 GRADIENT
DATE 22 M			SREF = LREF = SCALE =		z Z0			SREF = LREF = BREF = SCALE =		. 20		70

TABULATED SOURCE DATA - CA23B

ARC 14-120(CA23B) 747/1 ATI 02S1 (CARRIER DATA)

(UNHD20) (17 4 75)

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		5.000 .000 .000 .600		CBI 00021 00016 .00062		CBL 00016 .00015 .00057		CBL 00011 .00042 .00037		CBL . 00044 . 00035 . 00061		CBL .00069 .00037 .00069
	DATA	STAB = CLEVON = DX = MACH =		CYN . 00223 00215 00188	CY CYN . CYN	CYN 00202 00201 00179	CY CYN .0101800202 .0124300201 .0141000179	CYN 00260 00243 00225	٠	CYN -,00265 -,00252 -,00244		CYN 00256 00249 00002
	PARAME TR1C	30000		CY . 01155 . 01376 . 01494		.01018 .01243 .01410		CY .01120 .01232 .01399		CY .01051 .01245 .01445		CY .00983 .01226 .01455
	_	BETA = RUDDER = 10RB = DY		CLM 20933 24907 27708		CLM 21377 25259 28058		CLM 21634 25687 28548		CLM 21412 25572 28582 01792		CLM 21319 25504 28565
			-5.007 5.00	CD . 04758 . 05293 . 06207	.00/ 5.00	CD .04755 .05307 .06273	.007 5.00	.04708 .05271 .05284 .00394	.00/ 5.00	.004640 .05238 .06262	.00/ 5.00	CD .04615 .05227 .06258
REFERENCE DATA		5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC 327.7800 IN. YMRP = .0000 IN. YC 2348.0400 IN. ZMRP = 190.7500 IN ZC .0125		. 01599 . 18510 . 34660 . 08265	ŗ	CL .03226 .19479 .35786	GRADIENT INTERVAL = -5.	CL .04295 .21427 .37862	u rů	CL .05153 .22207 .39319	3.29 GRADIENT INTERVAL = -5	CL .05573 .22342 .39816 .08561
			GRADIENT INTERVAL	DY 36690 29638 38358	GRADIENT INTERVAL	0Y 37890 -,40109 -,39269		0Y 37297 40675 37248	GRADIENT INTERVAL	DY 36765 36932 44889 02031		DY 37556 37271 48330
			3.32	0x 10786 06237 07726	3.30 G	DX 06338 07556 05904	3.30 G	DX 10103 11109 11346	3.30 G	03140 14937 11437		08589 16317 10503 05023
			RN/L	10RB MACH 4.00000 58804 4.00000 58923 4.00000 59037 .00000 00058	MACH .58762 .58706 .58649	RN/L	MACH .58719 .58734 .58789	RN/L	MACH .58474 .58677 .00052	RN/L =	MACH . 58364 . 58507 . 58546 . 00046	
	CE DATA					10RB 4.00000 4.00000 4.00000		10RB 4.00000 4.00000 7.00000		10RB 4.00000 4.00000 7.00000		10RB 4.00000 4.00000 4.00000
	AET EKEN			10.000 ALPHAC .000 2.000 4.000 GRADIENT		15.000 ALPHAC .000 2.000 4.000 GRADIENT		30.000 ALPHAC .000 2.000 4.000 GRADIENT		45.000 ALPHAC .000 2.000 4.000 GRADIENT		50.000 ALPHAC .000 2.000 4.000 GRADIENT
		SREF = 5 LREF = 5 BREF = 2 SCALE =		20		2 0		* 20		* 20		" 20

311	15)		1.000 .000 .000 .600		CBI .00037 .00053 .000055		CBL .00010 .00076 .00060		CBL .00036 .00110 .00076		CBL 00026 .00057 .00108		CBL .00058 .00073 .00125		
PAGE	(UNH021) (17 OCT	DATA	.000 STAB		CY CYN .0081700137 .0135900156 .0167100155	CYN 00166 00155 00149		CYN 00156 00149 00036		CYN 00149 00128 00128		CYN 00172 00171 00163			
		PARAMETRIC DA				CY .00986 .01366 .01616		CY .00955 .01377 .01577		CY .00929 .01521 .01582		CY .00933 .01369 .01619			
		ď	BETA ** RUDDER ** 10RB ** DY **		CLM .12144 .08846 .05263 01720		CLM .11670 .08294 .04731		CLM . 11594 . 08173 . 04579 01754		CLM .11521 .08124 .04443		CLM .11574 .07772 .04086 01872		
	-120(C		6 € − 0	.00/ 5.00	CD .04672 .04823 .05310	00/ 5.00	CD .04673 .04800 .05328	.00/ 5.00	CD . 04667 . 04781 . 05329	.00.5	CD .04571 .04798 .05342	.00/ 5.00	CD .04566 .04741 .05320		
							5	CL 07687 .08489 .24435 .08031	#,	06304 09754 .25792	ī.	CL 06360 .10146 .26231	:	CL 04642 .10994 .26975	RVAL = -5.
m				GRADIENT INTERVAL	.20532 17981 15665 11565	GRADIENT INTERVAL	. 18138 - 19900 - 14147	GRADIENT INTERVAL	DY 13444 22685 20624 01795	GRADIENT INTERVAL	. 19366 - 19366 - 13890 - 1369	GRADIENT INTERVAL	DY 20571 24167 24788 01054		
DATA - CA23B			00 IN XC 00 IN XC 00 IN ZC	3.34 GR	0x .02471 .07777 02834	3.33 GR	0X 16238 .13195 .02309	3.33 GR	0X 11657 06359 02995	3.32 6	0X -15742 .06634 05118	3.34 6	DX 06336 04123 04123		
SOURCE	ARC 14		1339.9000 - 0000 - 190.7500	RN/L =	MACH . 59024 . 58971 . 58927	. 59024 . 58927 . 58927 00024 RN/L *	MACH .58967 .59009 .59008	RN/L =	MACH .59002 .59074 .59026	RN/L *	MACH .59003 .59012 .59019	RN/L =	MACH .58959 .58978 .58903		
TABULATED		E DATA	YMRP YMRP ZMRP		10RB 4.00000 4.00000 4.00000	1088 4.00000 4.00000 00000		10RB 4.00000 4.00000 4.00000		100000 4.000000 4.000000		100000 11.00000 000000 000000			
MAR 76		REFERENCE	5500.0000 SC. 327.7800 IN. 2348.0400 IN.		3.500 ALPHAC .000 2.000 4.000 GRADIENT		7.500 ALPHAC .000 2.000 4.000 GRADIENT		* 10.000 ALPHAC .000 2.000 4.000 GRADIENT		15.000 ALPHAC .000 2.000 4.000 GRADIENT		20.000 ALPHAC .000 2.000 4.000 GRADIENT		
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DATA	STAB = ELEVON = DX = MACH =		CYN -,00138 -,00163	•	CYN 00120 00153 00055	2) (17 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN 00073 00058 00054
PARAMETR1C	0000.		CY .00801 .01345 .01590		CY .00738 .01300 .01571	(UNHORE)	PARAME TRIC	BETA000 RUDDER000 10RB . 8.000 DY000		CY .00825 .00963 .01013
	BETA = RUDDER = 10RB = DY		CLM .11873 .07839 .04018		CLM . 12016 . 07897 . 04030				CLM 08610 11945 14996 01596	
		-5.00/ 5.00	.04516 .04700 .05306	-5.00/ 5.00	CD . 04504 . 04695 . 05305	RRIER DATA)			-5.00/ 5.00	CD .04336 .04677 .05363
		ĸ	CL 02759 .14072 .30366 .08291	ų	CL 02178 .14572 .30746	ATI O2SI (CARRIER				CL 06177 .09882 .26241 .08105
		GRADIENT INTERVAL	DY 28104 27460 17509	GRADIENT INTERVAL	0Y 32597 26854 11324	747/1			GRADIENT INTERVAL	DY .01217 22915 26636 06963
	39.9000 IN. XC .0000 IN. YC 30.7500 IN ZC	3.32	DX 02796 10861 16285 03372	DX 5702796 9610861 1416285 3303372	0x 03023 18927 21103 04520	14-120(CA23B)		300 IN. XC 300 IN. YC 500 IN ZC	RN/L = 3.31 G	DX 16255 01165 13636
	H H B	RN/L =	MACH .58957 .58896 .58944 00003		MACH .58947 .58885 .58978	ARC		FT. XMRP * 1339.9000 YMRP * .0000 ZMRP * 190.7500		MACH . 58837 . 58607 . 58491 00086
CE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP		10RB 4.00000 4.00000 1.00000		10RB 4.00000 4.00000 1.00000		E DATA			10RB B.00000 B.00000 B.00000
REFERENCE DATA	= 5500.0000 SO = 327.7800 IN = 2348.0400 IN = .0125		# 45.000 ALPHAC .000 2.000 P.000 GRADIENT		* 50.000 ALPHAC .000 2.000 4.000 GRADIENT		REFERENCE DATA	= 5500.0000 SQ.F' = 327.7800 IN. = 2348.0400 IN. = .0125		= 3.500 ALPHAC . 000 2.000 4.000 GRADIENT
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E 314	(27 T		5.000 .000 .000 .600		CBI .00028 .00085 .00096	1 75)		5 .000.000.0000.0000.0000.00000.00000.0000		CBL 00018 .00025 .00041		CBL 00008 .00047 .00014
FAGE	(2) (17 OCT	DATA	STAB ELEVON = OX MACH =		CYN 00235 00234 00236	3) (17 0CT	AT AC			CYN 00081 00082 00088		CYN 00099 00075
	(CINHORE)	PARAMETR1C	000.8 000.8		CY .01007 .01195 .01501	CUNHORS	PARAMETRIC	000.9		CY .00888 .01015 .01221		CY .00833 .00987 .01141
			BETA = RUDDER = 10RB = DY		CLM 19423 23734 26903			BETA RUDDER TORB TORB TORB		CLM 13833 18096 21441		CLM 15829 20006 23298 01867
	(CARRIER DATA)			-5.00/ 5.00	CD .04600 .05109 .06103	(CARRIER DATA)			-5.00/ 5.00	CD . 04607 . 05021 . 05823	00/ 5.00	CD . 0466 . 0507 . 0592
	0251			ĸ	CL . 03430 . 20062 . 37105 . 08419	AT1 0251 (CA)				CL 02737 .13280 .29575 .08078	ERVAL = -5.	CL 01402 .14630 .30860 .08066
88	3B) 747/1 ATI			GRADIENT INTERVAL	DY 19668 25501 16164	747/1			GRADIENT INTERVAL	DY 22757 26402 31779	GRADIENT INTERVAL	DY 26758 21541 25423
DATA - CA238	14-120(CA23B)		.9000 IN. XC .0000 IN. YC .7500 IN ZC	3.31	DX 00133 .00901 11080 02737	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.31 6	0x -, 10448 -, 14791 -, 09563	3.31 G	DX 12617 02447 05141
ABULATED SOURCE	ARC		= 1339 = 190	RN/L =	MACH . 58786 . 58925 . 58842	ARC		# 1339. = 190.	RN/L =	MACH .58722 .58696 .58675	RN/L =	MACH .58692 .58772 .58744
IABU		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP		8.00000 8.00000 8.00000 8.00000		REFERENCE DATA	FT. XMRP YMRP ZMRP		1CRB 6.00000 6.00000 6.00000		1088 6.00000 6.00000 6.00000
o Y		REFEREN	5500.0000 S3 327.7800 IN 2348.0400 IN		50.000 ALPHAC .000 2.000 4.000 GRADIENT		REFEREN	5500.0000 SO 327.7600 IN 2348.0400 IN		3.500 ALPHAC .000 2.000 4.000 GRADIENT		7.500 ALPHAC . UU0 2.000 4.000 GRADIENT
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315	157		5.000 .000 .000 .600		CBI . 00003 . 00005 . 00038		CBL .00036 .00063 .00053		CBL .00062 .00057 .00064		CBL 00017 .00080 .00088		CBL .00048 .00081 .00071
PAGE	1 1 100 0	DATA	STAB # ELEVON # DX # MACH #		CYN 00104 00093 000074		CYN 00113 00084 00076		CYN -,00215 -,00191 -,00180		CYN -,00235 -,00241 -,00230		CYN 00253 00243 00222
	(CONH023)	PARAMETRIC [9000.		. 00828 . 01010 . 01162		CY .00830 .00958 .01177		CY .00970 .01129 .01353		. 01059 . 01203 . 01203		CY .01072 .01213 .01422
		L	BETA = RUDDER = 10RB = DY		CLM 16757 20838 24053		CLM 18128 22303 25324 01799		CLM 19748 23850 27058 01827		CLM 20498 24754 27858		CLM 20590 24915 28021
	(CARRIER DATA)			.00/ 5.00	.04667 .05117 .05986	.00/ 5.00	CD .04679 .05176 .06071	.00/ 5.00	CD .04650 .05174 .06158	.00/ 5.00	CD .04648 .05186 .06182	.00/ 5.00	CD . 04632 . 05185 . 06189
	AT1 0251 (CAF			ا 5-	CL 00541 .15378 .32021	INTERVAL = -5	CL .00749 .17470 .33217	INTERVAL = -5	CL . 02878 . 18870 . 35861	ERVAL = -5	CL .04021 .20998 .37983	INTERVAL = -5	CL . 03944 . 20918 . 37943 . 08500
82	1/747			GRADIENT INTERVAL	07 -,32093 -,29826 -,31715	GRADIENT INT	07 27717 32458 31952	GRADIENT INT	DY -, 26229 -, 20880 -, 26464	GRADIENT INTERVAL	5.31603 31603 27867 01060	GRADIENT INT	0Y 39692 35762 35684
DATA - CA23B	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.31 G	0x 08080 03240 01548	3.31 6	0x 08769 04181 05553	3.31 6	0x 13357 01156 2751	3.31	DX .02545 10675 15959 04626	3.3;	08326 .06326 12785
ATED SOURCE	ARC		1339.	RN/L =	MACH .58720 .58738 .58743	RN/L	HACH .58887 .58732 .58698	RN/L #	MACH .58737 .58778 .58784	RN/L =	.588641 .588821 .588901	RN/L	MACH .587.29 .58809 .58823
TABULATED		CE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP		1088 6.00000 6.00000 6.00000		1088 6.00000 6.00000 6.00000		10RB 6.00000 6.00000 6.00000		10RB 6.00000 6.00000 6.00000		10RB 6.00000 6.00000 6.00000
IR 76		REFERENCE	5500.0000 SQ 327.7800 IN 2348.0400 IN		10.000 ALPHAC .000 2.000 4.000 GRADIENT		15.000 ALPHAC .000 2.000 4.000 GRADIENT		30.000 ALPHAC .000 2.000 4.000 GRADIENT		45.000 ALPHAC .000 2.000 4.000 GRADIENT		50.000 ALPHAC .000 2.000 4.000 GRADIENT
ATE 22 MAR			H H H H		* ZQ		• 20		• Z0		z zo		2 0
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TABULATED SOURCE DATA - CA23B

ARC 14-120(CA23B) 747/1 ATI 0251 (CARRIER DATA)

(UNH024) (17 007 75)

TACE 2.3

	0000.		CBI . 00026 . 00023 . 00063		CBL .00007 .00063 .00083		CBL .00049 .00078 .00096		CBL .000#4 .00079 .00070		CBL .00008 .00077 .00022
DATA	STAB = ELEVON = DX = MACH =		CYN 00116 00144 00135 0005		CYN 00129 00131 00127		CYN 00100 00116 00113		CYN 00115 00097 00107		CYN 00148 00150 00165
PARAMETRIC			. 00701 . 01162 . 01495		. 00775 . 01087 . 01475		. 00656 . 01103 . 01405		. 00686 . 01024 . 01424 . 00185		. 00782 . 01197 . 01523
	BETA RODDER RODDER RODA BY R		CLM .18606 .14362 .10759 01962		CLM .17120 .13007 .09394 01932		CLM .16365 .12266 .08672 01923		CLM .15465 .11295 .07695		CLM .13901 .10019 .06283
		-5.00/ 5.00	. 04460 . 04597 . 05029	.00/ 5.00	.04526 .04526 .04635 .05110	.00/ 5.00	CD .04524 .04651 .05135	.007 5.00	. 04535 . 04535 . 04669 . 05193	.007 5.00	. 04543 . 04586 . 05248
			CL 10988 .05906 .21895	INTERVAL = -5	CL -,08878 ,07001 .23028 .07977	INTERVAL = -5.	CL 07944 .07941 .23618	ι. R	CL 07332 .09:074 .25163	INTERVAL = -5.	CL 04820 .11278 .27511
		GRADIENT INTERVAL	DY 05439 04203 01917	GRADIENT INT	07 13760 07570 02463	GRADIENT INT	DY -, 04983 -, 07593 -, 00652	GRADIENT INTERVAL	07 -,01767 -,02567 -,025641 -,01602	GRADIENT INT	07 05168 00815 04740
	9000 IN. XC 0000 IN. YC 7500 IN ZC	3.34 6	DX 15710 05661 07286	3,33 6	0x - 15273 - 02438 - 04246	3.33 6	0x -,18388 -,00854 -,07576	3.32 6	DX 10235 .05297 .00257	3.3⁴ G	0x 09908 03402 11321
	1339.	RN/L =	MACH . 58656 . 58694 . 58738	RN/L #	MACH .58752 .58737 .58739 00003	RN/L	MACH .58782 .58743 .58764	RN/L =	MACH .58804 .58810 .58742	RN/L *	MACH .58757 .58751 .58750 00002
CE DATA	. FT. XMRP . YMRP . ZMRP		1088 6.00000 6.00000 6.00000		1088 6.00000 6.00000 6.00000		10RB 6.00000 6.00000 6.00000		10RB 6.00000 5.00000 6.00000		10RB 6.00000 6.00000 6.00000
REFERENCE	5500.0009 SO 327.7800 IN 2348.0400 IN		3.500 ALPHAC .000 2.000 4.000 GRADIENT		7.500 ALPHAC .000 2.000 4.000 GRADIENT		10.000 ALPHAC .000 2.000 4.000 GRADIENT		15.000 ALPHAC .000 2.000 4.000 GRADIENT		30,000 ALPHAC .000 2.000 4.000 GRADIENT
	H H H H		11		11		u		*		t)
	SREF LREF BREF SCALE		20		20		20		20		20

317	75)		-1.000 .000 .000		CBI .00040 .00096 .00096		CBL .00011 .00038 .00086	1 75 1		-1.000 .000 .000 .000		CBL . 00092 . 00181 . 00106
PAGE) (17 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN 00163 00187 00196		CYN 00175 00193 00187 00003	i) (17 OCT	DATA	STAB = ELEVON = DX MACH =		CYN 00201 00137 00164
	(UNHO24)	PARAMETR1C			CY .00819 .01354 .01639		CY . 00885 . 01352 . 01587 . 00175	(UNHO25)	PARAMETR1C	0000 0000 8		CY .00792 .00934 .01319
		•	BETA # RUDDER # 10RB # DY		CLM .13502 .09308 .05481 02005		CLM .13293 .09141 .05405			BETA ERUDDER E 10RB EDY		CLM .23602 .20057 .17362
	O251 (CARRIER DATA)			-5.00/ 5.00	CD .04499 .04675 .05244	-5.00/ 5.00	CD .04507 .04676 .05247	OZSI (CARRIER DATA)			5.00/ 5.00	CD . 04104 . 04278 04675
	AT1 0251 (CAF			μ	CL 03946 .12987 .29287	"	CL 03565 .13267 .29806	AT1 0251 (CA			H	CL 14796 .03207 .17814 .08153
6	747/1			GRADIENT INTERVAL	06028 07757 15908 02470	GRADIENT INTERVAL	07 02820 01953 08646	747/1			GRADIENT INTERVAL	CY . 17360 01841 02214 04893
DATA - CA23B	14-120(CA23B)		1,9000 IN. XC 1,0000 IN. YC 1,7500 IN ZC	3.32 G	.01170 .01170 19933 17441	3.32 6	03737 18265 13851 04397	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.34	0x 08582 14166 05494
TABULATED SOURCE DATA	ARC		1339 1 190	RN/L =	MACH .58586 .58569 .58677	RN/L =	MACH .58618 .58655 .58739	ARC		1339.	RN/L =	MACH .58688 .58853 .58754
TABUL		E DATA	FT. XMRP YMRP. ZMRP		1088 6.00000 6.00000 6.00000		1088 6.00000 6.00000 6.00000		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP		10RB 8.00000 8.00000 8.00000
1AR 76		REFERENCE DATA	5500.0000 SQ 327.7800 IN 2348.0400 IN 31.055		* +5.000 ALPHAC .000 2.000 4.000 GRADIENT		50.000 ALPHAC .000 2.000 4.000 GRADIENT		REFEREN	5500.0000 SQ. 327.7800 IN. 2348.0400 IN.		= 3.500 ALPHAC .000 2.000 4.000 GRADIENT
DATE 22 MAR			SREF = LREF = BREF = SCALE =		. 20		20			SREF ** LREF ** BREF ** SCALE **		20

318	15 1		-1.000 .000 .000		CBI . 00050 . 00125		CBL .00038 .00099 .00086		CBL .00035 .00040 .00139		CBL .00028 .00131 .00026		CBL .00036 .00072 .00122
PACE	1 1 1 0CT	DATA	STAB EELEVON EDX MACH		CYN 00167 00134 00154		CYN 00140 00128 00159		CYN 00138 00137 00100		CYN -,00146 -,00147 -,00001		CYN 00177 00194 00189
	(SZOHNO)	PARAMETRIC (8		CY .00695 .00914 .01343		CY .00606 .00862 .01393		CY .00673 .00996 .01270		CY .00747 .01127 .01445		CY .00824 .01304 .01556
		_	BETA REUDDER REUDDEB REUDDB REUDDB REUDDB REUDDB REUDDP REUDP REUDDP REUDP REUDDP REUD		CLM .21692 .18305 .15341 01588		CLM .20450 .17248 .14015		CLM . 18738 . 15095 . 11959 01695		CLM .16028 .12291 .08722		CLM .14871 .10765 .07138
	OZSI (CARRIER DATA)			.007 5.00	CD . 04251 . 04357 . 04784	.00/ 5.00	.04353 .04356 .04396 .04857	.00/ 5.00	.04413 .04529 .04961	.00/ 5.00	.04457 .04578 .05100	.00/ 5.00	.04446 .04446 .05147
	AT1 0251 (CA			# T.	CL 12312 .03961 .19416 .07932	INTERVAL = -5	CL 10433 .04136 .20425	INTERVAL = -5	CL 09466 .06508 .22219	INTERVAL = -5.	CL -,06970 -,09866 -,09866 -,25281	INTERVAL = -5	CL 05526 .11377 .27458
38	747/1			GRADIENT INTERVAL	07 11948 .02817 .00034	GRADIENT INT	08861 .06364 .06364 .03091	GRADIENT INT	04068 .04068 .03239 02535	GRADIENT INT	04159 .04159 .01715 03594	GRADIENT INT	70 01594 01874 00419
DATA - CA238	14-120(CA23B)		.9000 IN. XC .0000 IN. YC .7500 IN ZC	3.33	0x -,09264 -,09157 -,06110	3.33	X0 0.09040 0.03781 0.06054	3.32 6	DX -,11995 -,06631 -,08560	3.34 6	DX 13458 11840 17807	3.32 G	DX 05870 09865 17449
ATED SOURCE	ARC		1339	RN/L =	MACH .58726 .58832 .58763	RN/L	MACH .58784 .58815 .58774	RN/L	MACH .58688 .58833 .58759	RN/L ≠	MACH .58726 .58815 .58844	RN/L =	MACH .58850 .58832 .58778
TABULATED		REFERENCE DATA	FT. XMRP		1088 8.00000 8.00000 9.00000		10RB B,00000 B,00000 B,00000		10RB 8.00000 8.00000 9.00000		10RB 8,00000 8,00000 8,00000		10RB 8.00000 8.00000 8.00000
TAK 16		REFEREN	5500.0000 SQ 327.7800 IN 2348.0400 IN		7.500 ALPHAC .000 2.000 4.000 GRADIENT		10.000 ALPHAC .000 2.000 4.000 GRADIENT		15.000 ALPHAC .000 2.000 4.000 GRADIENT		30.000 ALPHAC .000 2.000 4.000 GRADIENT		45.000 ALPHAC .000 2.000 4.000 GRADIENT
טאוב ממ של			SREF = BREF = SCALE = S		• 20		. 20		. 20		z Z0		2 0

319	75)		-1.000 .000 .000		CBI .00067 .00120 .00121	1 52 1		5.000 .000 .000 .000		CBL .00091 00086 .00075		CBL . 00039 . 00001 . 00079
PAGE	(17 OCT	DATA	STAB * ELEVON * DX * MACH *		CYN 00146 00165 00194	1 (17 OCT	DATA	STAB E ELEVON = DX MACH =		CYN -,00042 -,00096 -,00082		CYN 00105 00000 00000
	(CONHO25)	PARAMETRIC [000.8		CY .00654 .01456 .01588	(UNH027)	PARAMETRIC	000 000 000 000 000		CY . 00449 . 01135 . 01014		CY .00695 .01008 .01089
		_	BETA RUDDER RUDDER RUDDER COY		CLM . 14674 . 10544 . 06820 01963			BETA # RUDDER # 10RB # DY #		CLM07760116361470001735		CLM 09876 13696 16904
	(CARRIER DATA)			-5.00/ 5.00	CD .04434 .04592 .05157	(CARRIER DATA)			-5.00/ 5.00	CD . 04284 . 04748 . 05396 . 05278	-5.00/ 5.00	CD . 04405 . 04811 . 05527 . 06281
	AT1 0251 (CAF			INTERVAL = -5.	CL 05097 .12066 .28172	1520			u	CL 05430 .12048 .27824	11	CL 03863 .12853 .28725 .08147
m	747/1			GRADIENT INTE	70 04207 - 01766 - 05471	1) 747/1 AT1	•		GRADIENT INTERVAL	07 .07762 .16832 .04725	GRADIENT INTERVAL	73 07934 09838 05539
DATA - CA238	14-120(CA23B)		00 IN. XC 00 IN. YC 00 IN ZC	3.32 GR	DX .01451 07501 18335 04946	14-120(CA23B)		100 IN. XC 100 IN. YC 100 IN ZC	3.29 GF	0X 04747 16311 20081	3.29 64	DX 11490 10494 14418
TABULATED SOURCE DATA	ARC 1		1339.9000 0000 190.7500	RN/L =	MACH .58749 .58818 .58720	ARC 1		* 1339.9000 * 0000 = 190.7500	RN/L =	масн . 58488 . 58749 . 58723	RN/L .	MACH .58594 .58694 .58659
TABULA		E DATA	FT. XMRP YMRP. ZMRP		10R8 8.00000 8.00000 8.00000		SE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP		10R8 9.00000 9.00000 8.00000		9.00000 9.00000 9.00000 9.00000
۶ 76		REFERENCE DATA	5500.0000 SQ.F' 327.7800 IN. 2348.0400 IN.		50.000 ALPHAC .000 2.000 4.000 GRADIENT		REFERENCE DATA	5500.0000 SQ. 327.7800 IN. 2348.0400 IN.		3.500 ALPHAC .000 2.000 4.000 GRADIENT		7.500 ALPHAC .000 2.000 4.000 GRADIENT
E 22 MAR			µ п н н		и			и и и и ы		*		
DATE			SREF LREF BREF SCALE		20			SREF LREF BREF SCAL		20		20

TABULATED SOURCE DATA - CA23B

CAGE 320

1 75 1		5.000 .000 .000 .000		CBI . 00000 . 00084 . 00085		CBL 00015 .00032 .00067		CBL .00003 .00080 .00077		CBL 00002 .00071 .00094		CBL .00018 .00052 .00067
T) (17 OCT	DATA	STAB E ELEVON D DX MACH		CYN 00139 00085 00089		CYN 00164 00145 00045		CYN 00222 00204 00177		CYN 00272 00281 00239		CYN 00278 00288 00250
(UNH027)	PARAMETR 1C	000. 000. 8.000.		CY .00851 .00879 .01146		CY . 00918 . 00972 . 01266		CY . 01022 . 01122 . 01331		. 01111 . 01297 . 01406		CY . 01053 . 01319 . 01444 . 00098
		BETA RUDDER = 10RB = DY		CLM 11208 14976 18363 01789		CLM 13360 17477 20811 01863		CLM 16926 21123 24451		CLM 18626 22874 26065		CLM 18498 23158 26409
(CARRIER DATA)			.00/ 5.00	CD . 04487 . 04844 . 0561	.00/ 5.00	CD . 04532 . 04957 . 05768	.00/ 5.00	. 04556 . 05027 . 05971 . 05971	.00/ 5.00	CD . 04568 . 05063 . 06023	00/ 2.00	.04505 .05052 .05058 .05068
AT1 0351 (CA			INTERVAL * -5	CL 02851 . 13242 . 29109 . 07990	INTERVAL = -5	CL 01384 .14975 .30902 .08071	INTERVAL = -5	CL . 01446 . 17631 . 34228 . 08196	INTERVAL = -5	CL .03667 .20104 .36724 .08264	ERVAL = -5.	. 02575 . 19856 . 37337 . 08691
1/242 1			GRADIENT INT	. 08776 . 08699 . 06433	GRADIENT INT	70 . 04284 . 04109 . 04469	GRADIENT INT	07 .03346 .06309 .02846 00125	GRADIENT INT	00509 .00509 .07027 00382	GRADIENT INT	07 .04160 .05879 .07356
14-120(CA23B		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.29	DX 15926 06494 07448	3.29	DX 17151 09136 13410	3.29 6	DX 13749 10994 12821	3.30 G	0X 07774 08693 16555	3.30 G	0x .04402 10936 16369 05193
ARC		= 1339. = 190.	RN/L =	MACH .58659 .58652 .58595	RN/L	MACH .58657 .58706 .58624 00008	RN/L .	MACH .58635 .58528 .58570 00016	RN/L #	MACH .58545 .58604 .58548 .00001	RN/L	MACH .58502 .58562 .57532
	REFERENCE DATA	T. XMRP VMRP ZMRP		10R8 8.00000 8.00000 9.00000		10RB 8.00000 8.00000 8.00000		10RB B.00000 B.00000 B.00000		10R8 8.00000 8.00000 8.00000		10RB B. 00000 B. 00000 B. 00000
	REFEREN	5500.0000 SQ 327.7800 IN 2348.0400 IN		= 10.000 ALPHAC .000 2.000 4.000 GRADIENT		15.000 ALPHAC .000 2.000 4.000 GRADIENT		. 30.000 ALPHAC . 000 2.000 4.000 GRADIENT		45,000 ALPHAC .000 Z.000 Y.000 GRADIENT		50.000 ALPHAC .000 2.000 4.000 GRADIENT
		SREF # LREF # BREF # SCALE #		. 20		20		* 20		. 20		. 20

321	15 1		5.000 .000 .000 .600		CBI .00054 .00051 .00049		CBL 00012 .00051 .00073		CBL .00026 .00046 .00068		CBL 00012 .00007 .00065		CBL 00021 .00047 .00085	
PAGE	(17 OCT	DATA	STAB # ELEVON # DX # MACH #		CYN 00335 00206 00282		CYN 00302 00267 00225		CYN 00279 00252 00203		CYN 00229 00202 00157		CYN 00295 00274 00208	
	(UNH034)	PARAMETRIC D			CY .01209 .01418 .01574		CY .01218 .01327 .01416		CY .01144 .01260 .01375		CY .01069 .01251 .01387		CY .01274 .01365	cenon.
		a	BETA REVUDDER RETORB RETORB		CLM 13213 17659 21189		CLM 15176 19335 22759		CLM 15794 20081 23468		CLM 17012 21307 24570		CLM 18901 23293 26527	00510
	(CARRIER DATA)			.00/ 5.00	00 .04592 .05994 .05817	00/ 2.00	CD .04650 .05903 .05313	.00/ 5.00	CD .04641 .05070 .05955	.00/ 5.00	CD . 04646 . 05121 . 06033	.00/ 5.00	CD . 04650 . 05156	. 00.558
	0351			* 5	CL 03268 .13357 .29278	INTERVAL = -5.	CL 01674 .14699 .30774	INTERVAL = -5	CL 00959 .1511 .31357 .08079	INTERVAL = -5	CL 00199 .16662 .32957 .08289	INTERVAL = -5	. 02124 . 18996 . 35743	cn+an.
	11 747/1 AT1			GRADIENT INTERVAL	01652 - 01652 - 01949 - 01044	GRADIENT INT	CY 02782 04403 04800 00505	GRADIENT INT	DY 02445 03676 06593	GRADIENT INT	CY - 05005 - 05788 - 07621 - 00554	GRADIENT INT	. 00569 - 04001 - 09332	•
DATA - CA23B	14-120(CA23B		000 IN. XC 000 IN. YC 000 IN ZC	3.29 61	0X 09135 .17907 .00698	3.29 6	0x -10221 -05748 -00159	3.29 6	0x - 09950 - 05662 - 03795 - 01539	3.29 0	05800. - 05800. - 05445	3.29	08490 06173 02490	03304
SOURCE	ARC 1		1339.9000 2.0000 190.7500	RN/L =	MACH .58836 .58780 .58729	RN/!	MACH .58714 .58690 .58754	RN/L #	MACH .58771 .58687 .58669	RN/L *	MACH .58751 .58668 .58727	RN/:	MACH .58634 .58733	E1000.
TABULATED		CE DATA	FT. XMRP YMRP ZMRP		10RB 6.00000 6.00000 6.00000		1088 6.00000 6.00000 6.00000		6.00000 6.00000 6.00000 6.00000		1088 6.00000 6.00000 0.00000		1088 6.00000 6.00000	. 00000
3 76		REFERENCE	5500.0000 SQ.F. 327.7800 IN. 2348.0460 IN.		3.500 ALPHAC .000 2.000 4.000 GRADIENT		7.500 ALPHAC .000 2.000 4.000 GRADIENT		10.000 ALPHAC .000 2.000 4.000 GRADIENT		15.000 ALPHAC C00 2.000 4.000 GRADIENT		30.020 ALPHAC 2.000 4.000	GRADIENT
DATE 22 MAR			SREF = 58 LREF = 58 BREF = 23		20		20		• 20		20		. 20	

CA23B
,
DATA
SOURCE
TABULATED

7AGE 322

(5/ 13		5.000 .000 .000)) !	CBI 00001 .00077 .00089		CBL .00045 .00084 .00134	1 75)		5.000 .000 .000		CBL 00045 .00034 .00040
(4) (17 OCT	DATA			CYN 00321 00268 00268		CYN 00299 00290 00262	51 (17 OCT	DATA	STAB = ELEVON = DX =		CYN 00206 00185 00146
(UNHO34)	PARAMETRIC			CY .01285 .01316 .01473		CY .01133 .01317 .01493	(UNH035)	PARAMETRIC	0000: - 3		CY . 01159 . 01191 . 01348
		BETA RUDDER I IORB II		CLM 19882 24180 27317 01859		CLM 19898 24355 27534			BETA RUDDER I IORB I		CLM 19962 26348 26341
(CARRIER DATA)			-5.007 F.00	9000	-5.00/ 5.00	CD .04585 .05115 .06107	03S1 (CARRIER DATA)			-5.00/ 5.00	CD .04771 .05234 .06121
AT1 03S1 (CA			INTERVAL = -5	3668 0726 7482 8453	ŧı	CL . 03675 . 20765 . 37926 . 08563				INTERVAL = -5.	CL 00147 .16456 .32868 .08254
747/1			GRADIENT INT	DY 05004 06051 .00100	GRADIENT INTERVAL	DY .01188 02287 05059	3) 747/1 ATI			GRADIENT INTE	DY . 05157 . 10413 . 03346
14-120 (CA23B)		3.9000 IN. XC .0000 IN. YC I.7500 IN ZC	3.30	25 C C C C C C C C C C C C C C C C C C C	3.30	DX . 05894 14432 16747	ARC 14-120(CA23B)		.9000 IN. XC .0000 IN. YC .7500 IN ZC	3.29 GF	DX 07973 01208 03882
ARC		1336	RN/L =	MACH .58727 .58711 .58752	RN/L =	MACH .58796 .58812 .58765	ARC		1339.90 .00 .190.75	RN/L =	MACH . 58696 . 58770 . 58780
	REFERENCE DATA	FT. XMRP		10RB 6.00000 6.00000 6.00000		10RB 6.00000 6.00000 6.00000		E DATA	FT. XMRP. ZMRP.		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	REFEREN	5500.0000 50.6 327.7800 1N. 2348.0400 IN.		45.000 ALPHAC .000 2.000 4.000 GRADIENT		50.000 ALPHAC .000 2.000 4.000 GRAD IENT		REFERENCE DAT	5500.0000 SQ.FT 327.7800 IN. 2348.9400 IN.		3.500 ALPHAC .000 2.000 4.000 GRADIENT
		SREF = LREF = BREF = SCALE =		= 20		* 20			SREF # BREF # SCALE #		2 0

323	(57)		5.000 .000 .000 .000		CBI - 00038 - 00031 - 00012		CBL .00025 .00024 .00016		CBL 00029 00038 .00030		CBL .00051 .00059 .00074		CBL .00009 .00034 .00071
PAGE	130 (17 007	DATA	STAB = ELEVON = DX MACH =		CYN 00196 00182 00137		CYN 00200 00177 00126		CYN 00176 00145 00106		CYN 00272 00266 - 10215		CYN -,00297 -,00266 -,00237
	(UNH035)	PARAMETRIC	0000.		CY .01140 .01258 .01344 .00051		CY .01095 .01280 .01370		CY .01143 .01266 .01318		CY .01226 .01419 .01506		CY . 01278 . 01368 . 01536
			BETA # RUDDER # 10RB = 0Y #		CLM 20726 23935 26922		CLM 20867 24368 24368 27260 01598		CLM - 2150 - 24642 - 27566 - 01604		CLM 21515 25376 28366		CLM 21639 25473 28557
	(CARRIER DATA)			.00/ 5.00	CD .04781 .05237 .06168	.00/ 5.00	CD . 04754 . 05236 . 06164	.00/ 5.00	CD .04738 .05251 .06196	.00/ 5.00	CD .04663 .05201 .06197	.00/ 5.00	CD . 04644 . 05162 . 05169
	AT1 0351 (CA			i,	CL .01516 .17637 .33802	ERVAL = -5	CL .02157 .18617 .34709	INTERVAL = -5	CL . 02856 . 19468 . 35654	INTERVAL = -5	CL . 03922 . 20961 . 38056	INTERVAL = -5	CL . 05016 . 21359 . 38790
38	747/1			GRADIENT INTERVAL	DY .05294 .05716 .06897	GRADIENT INTERVAL	07 . 12369 . 05689 . 07970	GRADIENT INT	07 .06725 .07796 .01371	GRADIENT INT	09440 .09440 .05238 .05946 00873	GRADIENT INT	0Y . 10000 . 04855 . 00955 02261
DATA - CA238	14-120(CA23B)		9000 IN. XC 7500 IN. YC 7500 IN ZC	3.29 6	0X -, 16588 -, 07436 -, 00439	3.29 6	0000. - 00000. - 00000. - 00000.	3.29 61	DX -,17434 -,05427 -,07067	3.29 G	DX 07086 10285 16552	3.30	DX . 04568 13136 19234 05951
ATED SOURCE	ARC		1339.	RN/L =	МАСН . 58699 . 58732 . 58723	RN/L =	MACH . 53779 . 58794 . 58841 . 00016	RN/L =	MACH . 58849 . 58824 . 58819	RN/L =	MACH . 58969 . 58898 . 58898	RN/L =	MACH . 58793 . 58837 . 58880
TABULATED		CE DATA	.FT. XMRP YMRP ZMRP		000000 000000 0000000		10R8 4.00000 4.00000 7.00000		000000. ¥		10R9 4.00000 4.00000		10RB 4.00000 4.00000 0.00000
IR 76		REFERENCE DAT	5500.0000 SQ 327.7800 IN 2348.0400 IN 2510.		7.500 ALPHAC .000 2.000 4.000 GRADIENT		10.000 ALPHAC .000 2.000 4.000 GRADIENT		15.000 ALPHAC .000 2.000 4.000 GRADIENT		30.000 ALPHAC .000 2.000 4.000 GRADIENT		45.000 ALPHAC .000 2.000 4.000 GRADIENT
DATE 22 MAR			SREF = 5 LREF = 6 BREF = 6 SCALE = 6		" 20		. 20		• · · · · · · · · · · · · · · · · · · ·		. 20		. 20

ORIGINAL PAGE IS OF POOR QUALITY

PAGE 324	(UNH035) () 7 001 75)	PARAMETRIC DATA	ER		CLM CY CYN CBI21679 .01307002950003125435 .01329002480000028565 .0151800231 .0006801722 .00053 .00016 .00025	(UNHO40) (17 OCT 75)	ATA	0000 ±		557 .014740036200019 646 .0155700338 .00003 270 .0176500329 .00033 928 .00073 .00008 .00013		CY CYN CBL 795 .015440041800044 795 .0149800346 .00031 335 .0174500329 .00046 863 .00050 .00022 .00023
	_		BETA RUDDER 10RB DY		CLM 21679 25435 28565			BETA RUDDER 10RB DY		CLM 14557 18646 22270 01928		CLM 15883 19795 23335
	ARRIER DATA)			-5.00/ 5.00	046 051 063	ARRIER DATA)			-5.00/ 5.00	CD . 04635 . 05076 . 05894	-5.00/ 5.00	CD .04682 .05109 .05953
	ATI 0351 (CARRIER			N	CL . 05400 . 21877 . 38875 . 08369	ATI OZSI (CARRIER			н	CL 01942 .15274 .31372 .08329	н	CL 00171 .16051 .32261 .08108
CA23B	38) 747/1			GRADIENT INTERVAL	07 .08025 .05529 ~.03100	3B) 747/1 AFI			GRADIENT INTERVAL	07 .01407 03599 01604	GRADIENT INTERVAL	77 .08346 00542 05533
1	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.30	DX .05959 16166 20141 06525	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	= 3.33 (DX 03191 01566 06186	■ 3.32 (DX 06427 05303 06491 00016
TABULATED SOURCE DATA	ARC		1339 7 H 190	RN/L	MACH . 58712 . 58810 . 58850 . 00035	ARC		# 1339.	RN/L	MACH .58585 .58731 .58671	RN/L	MACH . 58538 . 58728 . 58751
TABU		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP		10RB 4.00000 4.00000 1.00000		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP		100000 4.00000 4.00000 000000		100000 4.000000 4.000000 4.000000
22 MAR 76		REFERE	5500.0000 327.7800 2348.0400 .0125		50.000 ALPHAC . 000 2.000 H. 000 GRADIENT		REFERE	5500.0000 Si 327.7800 11 2348.0400 11		= 3.500 ALPHAC .000 Z.000 H.000 GRADIENT		a 7.500 ALPHAC .000 2.000 4.000 GRADIENT
DATE 22			SREF # LREF # BREF # SCALE #		2 0			SREF # LREF # BREF # SCALE #		20		20

325	15)		8.000 .000 .000 .000		CBI .00002 .000036 .00036		CBL 00008 .00027 .00054		CBL .00001 .00067 .00075		CBL 00002 .00012 .00061		CBL 00012 00017 .00057
PAGE	(17 001	DATA	STAB = ELEVON = DX = MACH =		CYN 00436 00356 00327		CYN 00401 00342 00307		CYN 00334 00298 00240		CYN 00302 00281 00245		CYN 00292 00277 00253
	(OHOHO)	PARAMETRIC D	2 0000. 2 0000. 3 0000.		CY .01607 .01551 .01737		CY .01409 .01544 .01683		CY .01357 .01437 .01500		CY .01303 .01417 .01589		CY .01255 .01417 .01643
		α.	BETA # RUDDER # 10RB # DY		CLM 16653 20515 24058		CLM 17375 21870 25088		CLM 19353 25893 01885		CLM 19892 24439 27747		CLM 19949 24641 27987 02010
	(CARRIER DATA)			.007 5.00	CD .04658 .05106 .05991	00/ 5.00	CD .04624 .05151 .06053	.00/ 5.00	CD .04598 .05162 .06124	.00/ 5.00	CD . 04566 . 05147 . 05166	.00/ 5.00	CD . 04555 . 05146 . 06179
	0251			S - "	.00535 .00535 .16591 .32991	INTERVAL = -5.	CL .00184 .18348 .34296 .08528	INTERVAL5	CL .02073 .19987 .36336	INTERVAL = -5	CL . 03011 .23670 .33019	INTERVAL = -5	. 03124 . 20972 . 38609 . 69971
õ	11 747/1 ATI			GRADIENT INTERVAL	. 08607 . 00619 . 02923 02983	GRADIENT INT	07 .05888 05011 06713	GRADIENT INT	04 . 06133 . 03333 04051 02546	GRADIENT INT	07. . 00303 04890 03169	GRADIENT INT	.07140 .07140 .02607 .05982
DATA - CA23B	14-120(CA23B		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.32 GF	0X -,10309 -,05271 -,09386	3.32 6	0x 08259 05371 03650	3.33	0x - 11834 - 04836 - 09299	3.33	03619 - 12600 - 16483	3.32	DX .11191 22841 18856
SOURCE	ARC 1		* 1339. * 190.	RN/L =	MACH .58556 .58579 .58753	RN/L =	MACH .58574 .58678 .58737	RN/L =	MACH .58568 .58780 .58718	RN/L =	MACH .58585 .58757 .58694	RN/L *	MACH .585%0 .587%5 .58688 .00025
TABULATED		CE DATA	TT. XMRP. YMRP. ZMRP		10RB 4.00000 4.00000 7.00000		10RB 000000 7,000000 000000		10000 4.00000 4.00000 00000		000000000000000000000000000000000000000		000000 0000000 00000000000000000000000
MAR 76		REFERENCE	5500.0000 SG 327.7800 IN 2348.0400 IN		10.000 ALPHAC .000 2.000 4.000 GRADIENT		15.000 ALPHAC .000 2.000 4.000 GRADIENT		30.000 ALPHAC .000 2.000 4.000 GRADIENT		45.000 ALPHAC .000 E.000 A.000 GRADIENT		= 50.000 ALPHAC . C00 2.000 4.000 GRADIEN*
DATE 22 M			SREF = F		• Z0		. 20		. 20		* ZQ		Z Q .

TABULATED SOURCE DATA - CA238

ARC 14-120(CA23B) 747/1 ATI 02SI (CARRIER DATA)

CCT 75)		5.000 5.000 .000		CBI 00011 . 00079		CBL . 00025 . 00083 . 00029		CBL .00061 .00100		CBL .00043 .00043		CBL .00030 .00061
1.17	DATA	STA ELE DX		CYN 00339 00303 00018		CYN 00317 00279		CYN -,00303 -,00262		CYN 00280 00246		CYN -,00306 -,00294 .00006
(ONHXIO)	PARAMETRIC	000.8		CY . 01316 . 01442		CY .01339 .01493		CY .01393 .01562		CY .01219 .01424		CY .01295 .01447
		BETA * RUDDER * 10R8 * DY *		CLM 05559 09165 01803		CLM 08210 12044 01917		CLM 09913 13902 01995		CLM 12887 16973 02043		CLM 18462 22147 01842
CARRIER DATA			-5.00/ 5.00	8556	-5.00/ 5.00	CD . 04524 . 05196 . 00336	.00/ 5.00	CD .04616 .05352	5.00/ 5.00	CD .04747 .05538 .00395	5.00/ 5.00	.00439 .00439
AT1 0251 (C/			u	CL . 07986 . 23997 . 09006	INTERVAL = -5	CL . 03823 . 25938 . 08057	ERVAL = -5.	CL .11034 .27248 .08107	INTERVAL = -5	CL .12903 .29092 .09095	1	CL .17058 .33210 .08076
747/1			GRADIENT INTERVAL	.69102 .65567 11768	GRADIENT INT	77 .10196 .12026	GRADIENT INTERVAL	DY 40753 29938 .05407	GRADIENT INT	0Y 37808 41522 01857	GRACIENT INTERVAL	07 47262 47028
ARC 14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.34	MACH . 59470 . 59129 00171	3.34	MACH .59623 .59497 00063	3.33	МАСН . 59778 . 59813 . 00017	3.35 6	MACH .59647 .59743 .00048	3.35 6	MACH .59650 .59596
ARC		= 1339. = 190.	RN/L =	00000 · 00000 · 00000 · 000000 · 000000 · 000000	RN/L .	00000 · 000000 · 000000 · 000000 · 000000	RN/L #	00000°.	RN/L *	x0 00000 ·	RN/L =	00000 · 000000 ·
	REFERENCE DATA	2.F1. XMRP 4. YMRP 1. ZMRP		10RB 8.00000 8.00000		10RB 8.00000 8.00000		10RB 8.00000 8.00000		10R8 8.00000 8.00000		10R8 8.00000 8.00000
	REFEREN	5500.0000 SQ. 327.7800 IN. 2348.0400 IN.		3.500 ALPHAC 2.000 4.000 GRADIENT		7.500 ALPHAC 2.000 4.000 GRADIENT		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GRADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT
		2. C.		r 220		# 20		n 20		° 20		# ZQ

327	15 1		5.000 5.000 .000 .000		CBI . 00051 . 00049 00001		CBL .00053 .00077 .00012	75)		5.000 5.000 .000		CBL . 00015 . 00047 . 00016		CBL .00049 .00071
PAGE	17 001	DATA	STAB = ELEVON = DX = MACH =		CYN 00297 00280 . 00008		CYN 00289 00285	(17 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN 00111 00084		CYN 00085 00071
	(UNHX10)	PARAMETRIC (000. 000. 000. 000.		CY .01274 .01443		CY .01189 .01436	(UNHX13)	PARAMETRIC I	0000.0000.		CY .01051 .01194		CY .00934 .01120
		L	BETA R RUDDER R 10RB R DY R		CLM 20987 24412 01713		CLM 21516 24982 01733		ŭ.	BETA = RUDDER = 10RB = DY		CLM 12704 16120 01708		CLM 14788 18256 01734
	(CARRIER DATA)			-5.00/ 5.00	CD . 05035 . 06008 . 00486	.00/ 5.00	CD . 05053 . 06026 . 00487	(CARRIER DATA)			-5.00/ 5.00	CD . 04770 . 05509 . 00369	.00/ 5.00	CD .04878 .05685
	0251			11	CL . 19343 . 35672 . 08165	#	CL .19671 .36506 .08417	0251				CL . 11785 . 27632 . 07923	RVAL = -5.	CL . 12999 . 29249 . 08125
œ.	1747/1 AT!			GRADIENT INTERVAL	0Y -,43160 -,47800 -,02320	GRADIENT INTERVAL	DY 49407 53399 02496	33 747/1 ATI			GRADIENT INTERVAL	07 40468 50809 05171	GRADIENT INTERVAL	70 +7,4767+, +1,9008 -,0667
DATA - CA23B	14-120(CA23B)		00 IN. XC 00 IN. YC 00 IN ZC	3.35 GR	MACH .59632 .59524 00054	3.35 GR	масн . 59473 . 59448 00013	14-120(CA23B		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.34 GF	MACH . 59463 . 59358 00052	3.34 GF	MACH . 59270 . 5928 00021
SOURCE	ARC 1		1339.9000 2 0000 190.7500	RN/L =	00000°	RN/L *	000000 000000 000000	ARC 1		1339.	RN/L =	00000°.	RN/L =	x0 00000 ·
TABULATED		E DATA	TET. XMRP TMRP TMRP TMRP		10RB 8.00000 8.00000		10RB 8.00000 8.00000		SE DATA	FT. XMRP YMRP ZMRP		1088 5.00000 6.00000		10R8 6.2020 6.0020 00000
IR 76		REFERENCE DATA	5500.0000 SQ. 327.7820 :N. 2348.0400 IN.		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC 2.000 4.000 GRADIENT		REFERENCE	5500.0000 50.F 327.7800 1N. 2348.0400 IN.		3.500 ALPHAC A.000 4.000 GRADIENT		7.500 ALPHAC 2.000 4.000 GRAD:ENT
DATE 22 MAR			SREF # 15 LREF # 15 BREF # 6		. 20		20			SREF = : LREF = : BREF = : SCALE = :		2 0		= Z0

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(UNHX13) (17 201 75) ARC 14-120(C423B) 747/1 ATI 02SI (CARRIER DATA)

	600.000.000.000.000.000.000.000.000.000		CBI .00031 .00042		CBL .00033 .00045		CBL .00024 .00067 .00021		CBL .00009 .000\$8		CBL .00069 .00096
DATA	STAB # ELEVON # DX # MACH #		CYN 00088 00080		CYN 00113 00099		CYN 00213 00223		CYN *.00236 00239 00002		CYN 00235 00243
PARAMETRIC	0000.9		CY .00910 .01136		CY .00960 .01164		CY .01149 .01407		CY .01184 .01403		CY .01162 .01428
	BETA # RUDDER # 10RB # DY		CLM 15898 19377 01740		CLM 17885 21221 01668		CLM 21177 24351 01587		CLM 22618 25773 01578		CLM 23104 26206 01551
		-5.00/ 5.00	CD 48640. 4974. 50400.	-5.00/ 5.00	.05013 .05857 .00422	.00/ 5.00	. 05109 . 05019 . 00015	.007 5.00	. 05141 . 06099 . 00479	-5.00/ 5.00	CD . 05134 . 06106 . 00486
			CL . 14066 . 30184 . 08059	et	CL .15017 .31490 .08236	ii N	CL .18284 .34257 .07985	ı. N	CL .20228 .35404 .08088	a	CL .20609 .37143 .08267
		GRADIENT INTERVAL	DY 56964 58322 00679	GRADIENT INTERVAL	DY 48587 51963 01688	GRADIENT INTERVAL	07 52819 50028 01395	GRADIENT INTERVAL	07 52069 54159 01045	GRADIENT INTERVAL	07 51807 55625 01909
	1.9000 IN. XC 1.0000 IN. YC 1.7500 IN ZC	3.33 6	MACH .59175 .59204 .00014	3.35 6	MACH .59106 .59101 00003	3.35 6	MACH .59039 .59057	3.35 6	MACH .59084 .59105	3.35 6	МАСН .59149 .59137 00006
	1339 190	RN/L =	XQ 000000.	RN/L =	000000. 000000.	RN/L =	00000. 00000.	RN/L	00000.	RN/L #	x0 00000 x0
REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP		10RB 6.00000 6.00000		10RB 6.00000 6.00000		10RB 6.00000 6.00000		10RB 6.00000 6.00000		1088 6.00090 6.00000 .00000
REFEREN	5500.0000 SQ 327.7800 IN 2348.0400 IN		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GRADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC 2.000 4.000 GRADIENT
	SREF # LREF # BREF # SCALE #		2 0		± 20		20		= ZQ		* 20

329	15)		5.000 5.000 10.000		CBI . 00026 . 00030		CBL 00023 .00022		CBL 00008 .00029		CBL . 00023 . 00023		CBL .00039 .00070 .00016
PAGE	(17 007	DATA	STAB = ELEVON = DX = MACH =		. 00010 . 00012 . 00012		CYN 00002 .00013		CYN .00025 .00015 00005		CYN 00045 00050		CYN 00198 0003
	(UNHX14)	PARAMETRIC [000.9		CY . 00885 . 01086		CY . 00915 . 01084		CY .00722 .01004		CY .00922 .01162		CY .01122 .01328
		_	BETA ERUDDER = 10RB E		CLM 12633 16041 01704		CLM 15325 18328 01501		CLM 16392 19568 01588		CLM 18437 21827 01695		CLM 22142 24949 01403
	(CARRIER DATA)			.00/ 5.00	CD . 04660 . 05489	.00/ 5.00	CD . 04875 . 05691 . 00408	.00/ 5.00	CD . 04937 . 05804 . 00433	.00/ 5.00	CD .05008 .05921	.00/ 5.00	CD . 05130 . 06104 . 00487
	0251			£ - ₽	CL .12788 .29670 .08441	ı. R	CL .14955 .31117	ا ا	CL .15406 .31742 .08168	η. Γ	CL .16422 .33464 .08521	INTERVAL = -5	CL . 19849 . 36235 . 08193
ρΩ	11 747/1 AT1			GRADIENT INTERVAL	DY 60672 62423	GRADIENT INTERVAL	70 57802 27576.	GRADIENT INTERVAL	07 65106 62205	GRADIENT INTERVAL	07 -,55318 -,65905 -,05293	GRADIENT INTE	DY 54427 65315 05444
DATA - CA238	14-120(CA23B)		00 IN. XC 00 IN. YC 00 IN ZC	3.34 66	MACH .58921 .58810 -,00056	3.34 6	MACH .59102 .59031 00035	3.33 G	MACH .58959 .58965	3.35 6	MACH .58831 .58836 .00002	3.35 6	МАСН . 58818 . 59074 . 00128
SOURCE	ARC 1		1339.9000 2.0000 190.7500	RN/L =	00000 10.00000 10.00000	RN/L =	DX 10.00000 10.00000	RN/L =	DX 10.00000 10.00000	RN/L =	0X 10.00000 10.00000.	RN/L *	0x 10.00000 10.00000
TABULATED		E DATA	FT. XMRP YMRP ZMRP		10RB 6.00000 6.00000		1088 6.00000 6.00000		1088 6.00000 6.00000		10RB 6.00000 6.00000		10RB 6.00000 6.00000
R 76		REFERENCE DATA	5500.0000 SQ. 327.7800 IN. 2348.0400 IN. .0125		3.500 ALPHAC 2.000 4.000 GRADIENT		7.500 ALPHAC P.000 Y.COO GRADIENT		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GRADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT
DATE 22 MAR			SREF = 51 LREF = 5 BREF = 2 SCALE = 2		# ZO		• zo		2 0		• ZQ		- 20

TABULATED SOURCE DATA - CA238
DATE 22 MAR 76

1 52		5.000 5.000 10.000		CBI .00088 .00061		CBL . 00049 . 00101 . 00026	1 51		5.000 5.000 10.000 .600		CBL .00037 .00004 00017		CBL .00033 .00016 00008	
(17 OCT	DATA	STAB = ELEVON = DX = 1		CYN -,00225 -,00216 -,0005		CYN 00232 00221 .00006) (17 OCT	DATA	STAB ± ELEVON ≡ DX # MACH #		CYN .00008 00049		CYN 00026 00056	
(UNHXI4)	PARAMETRIC D	0000.		. 01041 . 01313		CY .01167 .01356 .00095	CUNHXIS	PARAME TRIC	000. 000. 8 . 000		CY .00750 .01211		CY .00853 .01168	
	α.	BETA # RUDDER # 10RB # DY #		CLM 23527 26432 01452		CLM 23842 26654 01406			BETA = RUDDER = 10RB = DY		CLM 05484 08262 01389		CLM 08403 11400 01498	
RER DATA			00/ 5.00	05 .05147 .06185 .0618	5.00/ 5.00	. 05185 . 06199 . 00507	RIER DATA)			5.00/ 5.00	. 04391 . 05117 . 00363	.00/ 5.00	CD . 04580 . 05350 . 00385	
1 0251 (CARRIER			#	CL .20857 .38107 .03625	11	CL . 21844 . 38423 . 08290	1 0251 (CARRIER			INTERVAL = -5.	CL . 13248 . 23165	ERVAL = -5	CL . 11980 . 28269 . 08144	
1747/1 ATI			GRADIENT INTERVAL	07 58631 62227	GRADIENT INTERVAL	DY 57745 62433 02344	33 747/1 AT3			GRADIENT INTE	07 59402 65242 02920	GRADIENT INTERVAL	DY 66536 65825 .00356	
14-120(CA23B)		00 IN. XC 00 IN. YC 00 IN ZC	3.35 GR	MACH .59228 .59176	3.35 GR	MACH . 59041 . 59056 . 00008	14-120(CA23B)		. 9000 IN. XC . 0000 IN. YC I. 7500 IN ZC	3.34 G	MACH .59219 .58993 00113	3.34 6	MACH . 59002 . 58944 00029	
ARC 1		= 1339.9000 = .0000 = 190.7500	RN/L =	00000 10.00000 00000	RN/L =	000000 10.000000 10.00000	ARC		* 1339 * 190	RN/L =	000000. 000000. 000000.	RN/L *	0x 10.00000 10.00000	
	E DATA	FT. XMRP YMRP ZMRP		10RB 5.00000 6.00000		10RB 6.00000 6.00000		ATAC P	FT. XMRP. YMRP. ZMRP		10RB 8.00000 8.00000		10RB 8.00000 8.00000	
2	REFERENCE DAT	327. 348.		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC 2.000 4.000 GRADIENT		TAC BONDONSO	5500.0000 SQ. 327.7800 IN 2348.0400 IN		3.500 ALPHAC 2.000 4.000 GRADIENT		7.500 ALPHAC 2.000 4.000 GRADIENT	
		SREF LREF BREF SCALE # 2		# ZQ		= ZQ			SREF LREF BREF # 5		20		. 20	

XMRP = 1339.9000 IN. XC YMRP = 190.7500 IN. YC ZMRP = 190.7500 IN. XC PN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00 IO 00000	MAR 76		TABULATED	SOURCE	DATA - CA238		900	0110		(CINHXI)	PAGE 5) (17 OCT	E 331 T 75)
XMRP = 1339.9000 IN. XC YMRP = 190.7500 IN. YC ZMRP = 190.7500 IN. XC RUDDER = 0.000 ELEVON = 5.00 IORN		à	Š	ARC 14	14-120 (CA23B)	3) 747 AT	1 OZSI (CARRIER		à	TOWNATE ARAMETRIC	ATA	•
P = 1339.9000 IN. XC P = 190.7500 IN. YC DX MACH DY CL DX DX MACH DY CL DX DX MACH DY CL CD DX MACH DY CL CD DX MACH DY CL CD CLM CY CV	מבו באבועיני	Š u	<u> </u>								•	i i
DX MACH DY CL CD CLM CY CYNO CO CLM CY CYNO CO CLM CY CYNO CO CLM CY CYNO CO CO CLM CYNO CO CO CLM CYNO CO CO CO CLM CYNO CO	5500,0000 SQ.FT. 327,7800 IN. 2348.0400 IN.	F T .	XMRP YMRP ZMRP	1339.	ZZZ				~	000.8	-	. 600 . 600 . 600
DX MACH DY CL CD CLM CY CYNO COND COND COND COND COND COND COND CO					.33	RADIENT INTE		ř.				
DX MACH DY CL CD CLM CY CYN CYN 10.00000 .5882373661 .14907 .0485513334 .0101400083 10.00000 .5898871417 .31657 .0572116749 .0118300079 .00000 .00082 .01182 .001825 .0043301707 .00084 .000002	10.000 ALPHAC 10 2.000 8.0 4.000 8.0 GRADIENT .0		1088 8.00000 8.00000		ā ā ā	DY 69918 64470 .02724	3157 9669 9256 = -5	0647 0653 0033 7	CLM 10219 13423 01602	CY .00896 .01121	CYN 00042 00060	CBI .00039 .00033
DX MACH DY CL CD CLM CY CYN C CN 10.00000 .5882373661 .14907 .0485513334 .0101400083 10.00000 .5898871417 .31657 .0572116749 .0118300079 .00080 .00082 .01122 .08375 .0043301707 .00084 .00002					3		;	1				
	15.000 10RB 2.000 8.00000 4.000 8.00000 GRADIENT .00000		18 1000 1000 1000	00000 00000 000000 000000	MACH . 58823 . 58988 . 00082	DY 73661 71417.	CL . 14907 . 31657 . 08375	CD .04855 .05721	CLM 13334 16749 01707	CY .01014 .01183	•	CBL 00030 .00006
	30.000 ALPHAC 10RB 2.000 B.00000 4.000 B.00000 GRADIENT .00000	80.80 00.80	0000 0000 0000	00000 .01	MACH .58915 .59073	DY 59283 65031 02874	CL . 18411 . 34837 . 08213	CD . 05048 . 05987 . 06469	CLM 18845 22122 01639	CY .01107 .01382 .00137	CYN -,00228 -,00234 -,00003	CBL .00087 .00101
DX MACH DY CL CD CLM CY CYN 10.00000 .5891559283 .18411 .0504818845 .0110700228 10.00000 .5907365031 .34837 .0590722122 .0138200234 .00000 .0007902874 .08213 .0046901639 .0013700003				RN/L =	3.35		ii T	.00/ 5.00				
DX MACH DY CL CD CLM CY CYN 10.00000 .5891559283 .18411 .0504818845 .0110700228 10.00000 .5907365031 .34837 .0598722122 .0138200234 .00000 .0007902874 .08213 .0045901639 .0013700003 RN/L = 3.35 GRADIENT INTERVAL = -5.007 5.00	45.000 ALPHAC 1088 2.000 8.0000 4.000 8.0001 GRADIENI .0000	0.80	10R8 8.00000 8.00000	000000 000000 00000001	MACH , 58995 , 58956 - , 00020	DY 70121 69625 .00248	CL , 20365 , 35760 , 03198	CD . 05113 . 06094 . 00490	CLM 21479 24574 01548	CY .01164 .01412	CYN 00258 00253	CBL .00056 .00118
DX MACH DY CL CD CLM CY CVN 10.00000				# 7/Nd	3.35 (GRAC LENT INTI	z -5	.00/ 5.00				
DX MACH DY CL CD CLM CY CVN 10.00000	# 50.000 ALPHAC 11 2.000 8. 4.000 8. GRADIENT		10RB 8.00000 8.00000	23 00000 00000 00000	MACH .58887 .58933 .00023	DY -,71338 -,67087 -,02125	CL .20659 .37512	CD . 05125 . 06133	CLM 21978 25069 01546	CY .01184 .01420	CYN 00277 00262	CBL .00067 .00082

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CA23B	
1	
DATA	
SOURCE	
TABULATED	
TABU	
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CBI .00022 .00038 .00008 CBL .00053 .00008 CBL .00032 .00041 .00005 CBL .00058 .00099 CBL .00025 .00033 .00004 5.000 5.000 20.000 332 5 201 30 F C CYN -.00008 -.00031 CYN -.00042 -.00050 CYN -.00037 -.00054 -.00009 CYN -.00083 -.00102 -.00009 CYN .00219 .000224 STAB ELEVON DX MACH DATA CONHX16) PARAMETRIC CY .00776 .01061 CY .00782 .01108 .00855 .01110 CY .00857 .01207 .00175 CY .01067 .01311 6.000 CLM -.12689 -.15537 -.01424 CLM -.15231 -.18085 -.01428 CLM -.16466 -.19278 -.01406 CLM -.18553 -.21346 -.01397 CLM -.21954 -.24640 -.01343 BETA BUDDER 1 ARC 14-120(CA23B) 747/1 ATI 02SI (CARRIER DATA) 5.00 GRADIENT INTERVAL = -5.00/ 5.00 CD . 04630 . 05538 . 00454 GRADIENT INTERVAL = -5.00/ 5.00 CD .04979 .05852 .00437 GRADIENT INTERVAL = -5.00/ 5.00 GRADIENT INTERVAL = -5.00/ 5.00 CD .04897 .05757 .00430 CD . 05046 . 05962 . 00458 CD . 05179 . 06124 . 00472 GRADIENT INTERVAL = -5.00/ CL . 15085 . 31587 . 08251 CL .16466 .32781 .08158 CL .20357 .36766 .08204 CL .16611 .33252 .08320 .34561 .34561 .08120 0Y -.85011 -.75988 .04011 -.81185 -.81231 -.00023 -.76413 -.80148 -.01867 -.84 082 -.75 321 -.04 380 DY -.80629 -.85063 -.02217 1339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC MACH .59013 .58931 MACH .58937 .58980 .00022 MACH .58931 .58946 .00008 MACH .58974 .59003 .00015 .59004 .59027 .000011 3.34 3.34 3.33 3.35 3.35 RN/L DX 20.00000 20.00000 DX 20.00000 20.00000 RN/L RN/L DX 20.00000 20.00000 RN/L 20.00000 20.000000 RN/L 20.00000 20.00000 20.00000 XMRP YMRP ZMRP 10RB 6.00000 6.00000 10RB 6.00000 6.00000 10RB 6.00000 6.00000 10RB 6.00000 6.00000 10RB 6. d0000 6. 00000 REFERENCE DATA 5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN. 3.500 ALPHAC 2.000 4.000 GRADIENT 7.500 ALPHAC 2.000 4.000 GRADIENT 10.000 ALPHAC 2.000 4.000 GRADIENT 15.000 ALPHAC 2.000 4.000 GRADIENT 30.000 ALPHAC .00 4.000 GRADIENT SREF LREF BREF SCALE 20 20 20 20 20

PAGE	333	(57		5.000 25.000 20.000 .600		CBI .00058 .00088		CBL .00085 .00109	15)		5.000 5.000 20.000		CBL 00027 .00056 .00041		CBL .00007 .00035
FEFERENCE DATA TABULATED SOURCE DATA - CA38 TA711 AT1 0251 ICARRIER DATA TA721 AT1 0251 ICARRIER DATA TA722 TA	PAGE	(17	DATA			CYN 00249 00253		CYN -,00246 -,00254 -,00004	_	DATA	M M W H		CYN 00097 00127 00015		CYN 00118 00132 00007
FEFERENCE DATA - CA238 RETERENCE DATA - CA238 FEFERENCE DATA - CA238 FEFERENCE DATA FRILL 3.35 GRADIENT INTERVAL = -5.007 5.00 CLH FRILL 3.35 GRADIENT INTERVAL = -5.007 5.00 FRILL 3.35 GRADIENT INTERVAL = -5.007		(UNHX 16	ARAME TRIC			CY . 01117 . 01414 . 00149		CY .01084 .01419 .00168	CONHX 1	PARAME TRIC	. 000 . 000 . 000 . 000		CY .00893 .01512		CY .00987 .01392 .00203
Park 76 TABULATED SCURCE DATA - CA238 747/1 AT1 O251 (CARRIER DATA) REFERENCE DATA ARC 14-120(CA238) 747/1 AT1 O251 (CARRIER DATA) ARC			u.			CLM 23442 26107 01332		CLM 23714 26406 01346					CLM -,06286 -,07928 -,00821		CLM 08828 11053 01112
FEFERENCE DATA		RIER DATA)			5.0	CD . 05221 . 06213	Ŋ.	CD .05188 .06237 .00525					CD .04261 .05042	.007	CD . 04475 . 05254 . 00389
### 76 TABULATED SCURCE DATA — CA238		1520				CL .21949 .38645 .08348	l H	CL .21729 .38954 .08613	0251			il.	CL . 11412 . 28990 . 09789	ī -5	CL .13327 .30140 .08407
PEFERENCE DATA	m	1/247			ADIENT INTE	DY 75331 77027 00848	ADIENT INTE	DY 80299 77864	1/247 (ADIENT INTE	DY 53583 91880		DY -,71654 -,86406 -,07376
### 76 TABULATED SOURCE ###################################	•	+-120(CA23B		ZZZ	.35	MACH .58948 .58970 .00011	35	MACH .58887 .58896 .00005	4-120(CA238		zzz	¥.	MACH .58981 .58835	34	MACH .59078 .58999 00039
### 76 ################################	SOURCE			1339.		00000 20.00000 20.00000	<u>خ</u> ب	0X 20.00000 20.00000			= 1339. = 190	. J Ż	20.0000 20.00000 20.00000	¥/-	DX 20.00000 20.00000
# 5500.0 # 5300.0 # 537.0 # 537.0 # 53.0 # 5	TABULA		E DATA	, L		10RB 6.00000 6.00000 .00000		10RB 6.00000 6.00000		CE DATA	<u>.</u>				10RB B.00000 B.00000
от нава пада 			REFEREN	SZZ Z		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC P.000 4.000 GRADIENT		REFEREN	5500.0000 SC 327.78C0 IN 1348.0400 IN		3.500 ALPHAC P.000 P.000 GRADIENT		7.500 ALPHAC 2.000 4.000 GRADIENT
DATE 2 SREF SREF BREF BREF BREF CREF CREF CREF CREF CREF CREF CREF C	22			H H B H							ниия				

SE 334	CT 75)		5.000 5.000 20.000		CBI . 00039 . 00012		CBL .00002 .00043		CBL .00096 .00081 00007		CBL .00033 .00028 00002		CBL . 00079 . 00086 . 00004
PAGE	(17 001	DATA	STAB # ELEVON # DX # MACH #		CYN 00132 00134 00001		CYN 00165 00151		CYN 00273 00292 00010		CYN 00278 00282 00002		CYN 00291 00274
	(UNHX 17)	PARAMETRIC	000. 000. 8		CY: 01040 01296		CY .01119 .01288 .00084		CY .01161 .01556		CY .01200 .01493		CY .01199 .01427 .00114
			BETA * RUDDER * 10RB * DY		CLM 10403 13156 01377		CLM 13366 16206 01420		CLM 18722 21752 015153		CLM 21453 24264 01405		CLM 21834 24725 01445
	RRIER DATA)			-5.00/ 5.00	CD .04637 .05403	.00/ 5.00	CD . 04760 . 05581 . 00411	.00/ 5.00	00 . 04949 . 05879 . 00465	5.00/ 5.00	.05047 .05041 .05041	.007 5.00	CD . 05040 . 06030
	ATI OZSI CCARRIER			H	CL . 14666 . 30947 . 09141	ERVAL = -5	CL . 15527 . 32078 . 08275	i,	CL . 18382 . 35363 . 08491	p	CL .25581 .37328 .03373	INTERVAL = -5.	CL .20322 .37291 .08485
238	747/1			GRADIENT INTERVAL	DY 82520 81252	GRACIENT INTERVAL	07 - ,83998 83206 00396	GRADIENT INTERVAL	DY 87982 77306 .05338	GRADIENT INTERVAL	07 82857 -78742 .02058	GRADIENT INT	DY 87139 82092
DATA - CA23B	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.33	мAСН . 59142 . 59107	3.35	MACH .59121 .59220 .00050	3.35 6	MACH .59109 .59091	3.35 6	MACH .59145 .59106 00020	3.35 6	MACH .59044 .59121
TABULATED SOURCE	ARC		# 1339. # 190.	RN/L =	UX 20.00000 20.00000	RNIL	DX 20.00000 20.00000	RN/L ≠	DX 20.00000 20.000000	RN/L =	20.00000 20.000000 20.0000000	RN/L =	20.00000 20.00000 20.00000
TABU		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP		10RB 8.00003 8.00000		10RB 8.00000 8.00000		10R8 8.00000 8.00000		10RB 8.00000 8.00000		1088 8.00000 8.000000
IAR 76		REFERE	5500.0000 S 327.7800 1 2348.0400 11		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GRADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC 2.000 4.000 GRADIENT
DATE 22 MAR			SREF ** LREF ** BREF ** SCALE **		= ZQ		- 20		2 0		. 20		2 0

335	15)		5.000 .000 .000 .600		CBI 00082 .00073		CBL .00002 .00078 .00038		CBL .00084 .00085		CBL .00031 .00067 .00018		CBL .00079 .00076 00002
PAGE	t 17 0CT	DATA	STAB = ELEVON = DX = MACH = ELEVON = EL		CYN -,00103 -,00081		CYN 00108 00091		CYN 00098 00091		CYN 00156 00144 00004		CYN 00205 00177
	(UNHX27)	PARAMETRIC [0000.8		. 01142 . 01018 . 00062		CY . 01013 . 01094		CY .00884 .01149		CY .00973 .01264		CY .01124 .01331 .00104
		_	BETA # RUDDER # 10RB # DY #		CLM 11635 14668		CLM 13706 16894 01594		CLM 14983 18372 01695		CLM 17478 20803 01663		CLM 21128 24449 01661
	(CARRIER DATA)			-5.00/ 5.00	. 04743 . 05395 . 00326	-5.00/ 5.00	CD .04810 .05528 .00359	.00/ 5.00	CD .04844 .05613 .00385	.007 5.00	CD .04957 .05768	.00/ 5.00	CD . 05028 . 05972 . 004
•	0351			16	CL .12000 .27853 .07926	INTERVAL = -5.	CL . 12840 . 28738 . 07949	INTERVAL = -5.	CL .13235 .29109 .07937	ι ζ.	CL .14975 .30915	ر ا = ا	Ct. . 17642 . 34235 . 08296
60	1 747/1 ATI			GRAGIENT INTERVAL	0Y .15855 .34730	GRADIENT INTE	09435 .09435 .05201 02117	GRADIENT INTE	04488 .04488 .06129	GRADIENT INTERVAL	70 . 04020 . 04479 . 0230	GRADIENT INTERVA	07 .06130 .02755 01687
DATA - CA23B	14-120(CA23B)		.9000 IN. XC .0000 IN. YC .7500 IN ZC	3.31 GR	MACH .58756 .58727 00014	3.30 GR	MACH . 58696 . 58662 00017	3.30 GF	MACH . 58623 . 58597 00013	3.30 GF	MACH .58706 .58628	3.29 6	MACH .58533 .58575 .00021
TABULATED SOURCE	ARC 1		1339.90 2 .00 190.75	RN/L =	×0.00000 000000	RN/L =	XQ 000000 ·	RN/L =	00000 .	H NO	8888 8888 8888 8888 8888 8888 8888 8888 8888	RN/L =	00000 · · · · · · · · · · · · · · · · ·
TABULA		E DATA	.FT. XMRP YMRP ZMRP		1088 8.00000 8.00000		1088 8.00000 8.00000		10RB 8.00000 8.00000		1088 8.00000 8.00000		10R8 8.00000 8.00000 00000
3 76		REFERENCE DATA	5500.0000 SQ. 327.7800 IN. 2348.0400 IN.		3.500 ALPHAC 2.000 4.000 GRADIENT		7.500 ALPHAC 2.000 4.000 GRADIENT		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GRADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT
DATE 22 MAR			H H H M		* Z		= 20		# 20		* Z0		. Z0
ď			SREF LREF BREF SCALE		20		٥		۵		ii ii		J

TABULATED SOURCE DATA - CA238

ARC 14-120(CA23B) 747/1 ATI 03SI (CARRIER DATA)

(UNHXZ7) (17 001 75)

PAGE 335

·	6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		CBI .00071 .00093		CBL 00054 00070	1 75 1		5.000 .000 10.000		CBL .00022 .00048		CBL . 00022 . 00031 . 00005
. ★ <u> </u>			CYN 00281 00240 .00021		CYN 00289 00250	3) (17 OCT	DATA	STAB # ELEVON # DX # MACH #		CYN 00173 00154		CYN 00146 00121
PARAMETRIC	000.8		CY .01297 .01408		CY .01317 .01443 .00063	(UNHX28)	PARAME TRIC			CY .01118 .01292		CY . 01083 . 01246
	BETA RUDDER IORB E		CLM 22877 26062 01593		CLM 23161 26405 01622			BETA = RUDDER = 10RB = DY		CLM 17410 20581 01586		CLM -, 19444 -, 22447 -, 01501
		-5.00/ 5.00	CD . 05064 . 06025 . 00481	5.00/ 5.00	CD .05053 .06068	RRIER DATA)			-5.00/ 5.00	CD .04857 .05784 .00464	.00/ 5.00	CD .05001 .05885 .00442
			CL . 20103 . 35729 . 08313	19	CL . 19867 . 37330 . 08731	ATI 03SI (CARRIER			INTERVAL = -5	CL .14405 .31189 .08392	INTERVAL = -5.	CL . 16089 . 32618 . 08264
		GRADIENT INTERVAL	.06827 00121 03474	GRADIENT INTERVAL	05736 .05736 .0769	747/1			GRADIENT INT	01230 09360 .05295	GRADIENT INTE	DY . 02369 . 03178 . 00404
	9000 IN. XC 0000 IN. YC 7500 IN ZC	3.30	MACH .58607 .58557 00025	3.30 6	MACH .58565 .58536 00015	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.31 6	MACH .58687 .58723	3.30 6	МАСН . 58766 . 58809 . 00022
	1339.	RN/L	00000 · 00000 · 00000 · 00000 · 00000 · 00000 · 00000 · 00000 · 00000 · 00000 · 00000 · 00000 · 00000 · 00000 · 00000 · 000000	RN/L #	xd 00000 · 00000 ·	ARC		1339	RN/L =	DX 10.00000 10.00000 .00000	RN/L =	DX 10.00000 10.00000
REFERENCE DATA	T. XMRP I. YMRP I. ZMRP		10RB 8.00000 8.00000		10R8 8.00000 8.00000		REFERENCE DATA	SQ.FI. XMRP IN. YMRP IN. ZMRP		10RB 5.00000 5.00000		10RB 6.00000 6.00000
REFEREN	5500.0000 SQ 327.7800 IN 2348.0400 IN		* 45.000 ALPHAC 2.000 4.000 GRADIENT		= 50.000 ALPHAC 2.000 4.000 GRADIENT		REFEREN	5500.0000 SQ. 327.7800 IN. 2348.0400 IN.		= 3.500 ALPHAC 2.000 4.000 GRADIENT		- 7.500 ALPHAC 2.000 1.000 GRAD:ENT
	SREF "LREF" BREF "SCALE"		20		2 0			SREF = LREF = BREF = SCALE =		Z0		Z0

DATE 2	22 MAR	97 8	TABULATED	SOURCE	DATA - CA23B	6					PAGE	E 337
				ARC 14	14-120(CA23B)	1747/1 AT1	1 03SI (CARRIER	RIER DATA)		(UNHX28)	1) (17 OCT	T 75)
		REFERENCE DATA	E DATA						a.	PARAMETRIC	DATA	
SREF LREF BREF SCALE		5500.0000 SQ.I 327.7800 IN. 2348.0400 IN.	FT. XMRP YMRP ZMRP	1339.9000 0000 190.7500	0 IN. XC 0 IN. YC 0 IN. ZC				BETA # RUDDER # 10RB # DY		STAB = ELEVON # DX # MACH =	5.000 .000 10.000
				RN/L =	3.30 GR	GRADIENT INTERVAL	RVAL = -5.00/	00/ 5.00				
20	•	10.000 ALPHAC 2.000 4.000 GRADIENT	10RB 6.00000 6.00000	0X 10.00000 10.00000	MACH .58624 .00016	. 00874 05953 . 03414	CL . 16971 . 33064 . 68046	CD . 05029 . 05940 . 00456	CLM 20397 23247 01425	CY .00979 .01163	CYN 00115 00095	CBI . 00015 . 00047 . 00016
				PN/L =	3.30 GR	GRADIENT INTERVAL	ا اج	00/ 5.00				
20	ı	15.000 ALPHAC 2.000 4.000 GRADIENT	1088 6.00000 6.00000	DX 10.00000 10.00000	MACH .58701 .58720	08814 .02589 03113	CL . 18158 . 34148 . 07995	CD .05089 .06019	CLM 21727 24514 01393	CY .01062 .01080	CYN 00101 00067	CBL .00007 .00048 .00021
				RN/L =	3.29 GR	GRADIENT INTERVAL	ii R	.00/ 5.00				
2 0	4	30.000 ALPHAC 2.000 4.000 GRADIENT	10RB 6.00000 6.00000	DX 10.00000 10.00000	MACH .58688 .58711	05832 .05832 .06636	CL . 19842 . 36468 . 08313	. 05092 . 06133 . 0653	CLM 23814 26590 01388	CY .01148 .01354	CYN 00217 00193	CBL .00081 .00064 00008
				RN/L =	3.30 GF	GRADIENT INTERVAL	ا ا	.00/ 5.00				
ZU	•	45.000 ALPHAC 2.000 4.000 GRADIENT	10RB 6.00000 6.00000	DX 10.00000 10.00000	MACH .58645 .58643 00001	DY 01492 .07284 .04398	CL .20986 .27668 .8341	CD .05104 .06170	CLM 24617 27337 01360	CY .01230 .01450	CYN 00264 00249	CBL .00093 .00118
				RN/L =	3.30 GF	GRADIENT INTERVAL	il L	.00/ 5.00				
20	•	50.000 ALPHAC A.000 4.000 GRADIENT	1088 6.00000 6.00000	000000 10.000000 10.000000	MACH .58633 .58669 .00018	07 .05297 .02953 01172	CL .21651 .38688 .08519	CD .05122 .06172	CLM 24889 27487 01299	CY .01287 .01430 .00071	CYN -,00273 -,00238	CBL .00072 .00109

338	1 75 1		5.000 .000 10.000		CBI . 000355 . 00004 00016		CBL .00047 .00043		CBL . 00064 . 00079 . 00008		CBL .00015 .00054 .00019		CBL .00022 .00055
PAGE	17 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN 00156 00178 00011		CYN 00145 00140		CYN 00141 00116		CYN 00095 00076		CYN 00178 00162
	(UNHX29)	PARAME TR 1 C			CY .01026 .01470 .00222		CY .01023 .01319		CY .01033 .01218		CY .00942 .01105		CY .01129 .01305
			BETA = RUDDER = 10RB = DY		CLM -,11175 -,13869 -,01347		CLM 13503 16259 01378		CLM 14957 17827		CLM 17308 20266 01479		CLM 21388 24241 01427
	RRIER DATA)			-5.00/ 5.00	CD . 04512 . 05402 . 00445	.00/ 5.00	CD . 04691 . 05550 . 00430	.00/ 5.00	CD .04810 .05654	.00/ 5.00	CD .04928 .05772	.00/ 5.00	CD . 05023 . 05999 . 00488
	ATI 0351 (CARRIER			INTERVAL5	CL 11519 28321 08401	INTERVAL = -5	CL . 13195 . 29675 . 08240	ERVAL * -5	CL . 14345 . 30592 . 08123	i,	CL . 15801 . 31924 . 08062	INTERVAL = -5.	CL . 18838 . 34993 . 08078
338	747/1			GRADIENT INT	07085 .00873 .00873	GRADIENT INT	07 . 03020 . 03353	GRADIENT INTERVAL	07 01491 .04742	GRADIENT INTERVAL	07 . 09362 . 06535	GRADIENT INT	07 . 05480 . 05027 00226
DATA - CA238	14-120(CA23B)		3.9000 IN. XC .0000 IN. YC 1.7500 IN ZC	3.31	MACH .58965 .58806 00080	3.30 6	MACH .58849 .58815	3.30 6	MACH .58770 .58827 .00028	3.30 6	MACH .58809 .58829	3.29 6	МАСН . 58839 . 58842 . 00001
TABULATED SOURCE	ARC		1335	RN/L =	DX 10.00000 10.00000	RN/L .	DX 10.00000 10.00000	RN/L #	0X 10.00000 10.00000	RN/L	0x 10.00000 10.00000	RN/L	000000.0000000000000000000000000000000
TABUI		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP		10RB 8.00000 8.00000		10RB 8.00000 8.00000		10RB 8.00000 8.00000		10RB 8.00000 8.00000		1088 8.00000 8.00000
MAR 76		REFERE	5500.0000 S 327.7800 1 2348.0430 1		3.500 ALPHAC 2.000 4.000 GRADIENT		7.500 ALPHAC 2.000 4.000 GRADIENT		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GRAD:ENT		30.000 ALPHAC 2.000 4.000 GRADIENT
DATE 22 M			SREF # LREF # BREF # SCALE #		e 20		2 0		Z ZQ		= 20		• ZQ

339	75)		5.000 10.000 .600		CBI . 00054 . 00070 . 00008		CBL .00094 .00132	1 75)		5.000 .000 20.000 .600		CBL . 00125 . 00146 . 00011		CBL .00091 .00112
PAGE	(17 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN 00262 00252		CYN 00268 00234 .00017	1) (17 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN 00188 00183		CYN 00165 00154
	(UNHX29)	PARAMETRIC [0000		CY .01247 .01490		CY .01233 .01391 .00079	(UNHX30	PARAME TRIC	. 000 . 000 . 000 . 000		CY .01115 .01389		CY .01084 .01315 .00116
		ш.	BETA = RUDDER = 10RB = DY		CLM 23114 25919 01403		CLM 23353 26181 01414			BETA # RUDDER # 10RB = DY #		CLM 11313 13389 01038		CLM 13710 15953 01122
	(CARRIER DATA)			.007 5.00	CD .05083 .06075	.007 5.00	CD . 05061 . 06075	(CARRIER DATA)			.00/ 5.00	CD .04521 .05344 .00411	00/ 5.00	CD .04676 .05505
	0351			i.	CL . 20265 . 37063 . 08399	II .	CL . 20513 . 37211 . 08349	AT1 0351 (CA			INTERVAL = -5	CL . 1 2627 . 29472 . 08422	ERVAL = -5	CL .14310 .30726 .08208
m	1747/1 AT1			GRADIENT INTERVAL	DY .06013 .11899 .02943	GRADIENT INTERVAL	07 . 05102 . 07609 . 01254	1/2/1			GRADIENT INT	0Y .02299 .04884 .01293	GRADIENT INTERVAL	03582 .03591 .03591
CE DATA - CA238	14-120(CA23B)		00 IN. XC 00 IN. YC 00 IN ZC	3.30 GR	MACH .58880 .58936 .00028	3.30 GR	MACH .58687 .58724 .00019	14-120(CA23B)		000 IN. XC 000 IN. YC 500 IN ZC	3.31 6	MACH .58488 .58554	3.30	MACH . 59582 . 58609 . 00013
TABULATED SOURCE (ARC 1		1339.9000 0000. 190.7500	RN/L =	00000 10.00000 10.00000	RN/L =	DX 10.00000 10.00000	ARC		1339.9000 - 0000 - 190.7500	RN/L =	0X 20.00000 20.00000	RN/L =	DX 20.00000 20.00000
TABULA		E DATA	FT. XMRP YMRP ZMRP		1088 8.00000 8.00000		10RB 8.00000 8.00000		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP		10RB B.00000 B.00000		10RB B.00000 B.00000
MAR 76		REFERENCE DATA	5500.0000 SQ. 327.7800 IN. 2348.0400 IN.		# 45.000 ALPHAC 2.000 4.000 GRADIENT		* 50.000 ALPHAC 2.000 4.000 GRADIENT		REFEREN	5500.0000 SQ 327.7800 IN 2348.0400 IN .0125		* 3.500 ALPHAC 2.000 4.000 GRADIENT		7.500 ALPHAC 2.000 4.000 GRAD:ENT
DATE 22 M			SREF * BREF * SCALE *		20		. 20			SREF * LREF * BREF * SCALE *		2 0		20

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340	001 75)		5.000		CBI .00070 .00083		CBL .00049 .00088		CBL .00065 .00130		CBL .00051 .00101		CBL .00109 .00095
PAGE	(17	A T A C	STAB STAB ELEVON # DX MACH #		CYN -,00150 -,00136		CYN 00126 00108		CYN 00185 00173		CYN 00260 00238		CYN 00271 00257
	(UNHX30)	PARAMETRIC	000.8		CY ,01069 ,01268		CY .01012 .01206		CY .01042 .01301		CY .01205 .01374 .00085		CY . 01193 . 01468
			BETA BRUDDER BIORB BOY		CLM 15160 17647 01243		CLM 17519 20131 01306		CLM 21351 24102 01376		CLM 23214 25807 01297		CLM 23566 26171 01303
	03SI (CARRIER DATA)			-5.00/ 5.00	9268	.00/ 5.00	CD .048 .057	.00/ 5.00	CD .04951 .05953 .00496	.00/ 5.00	.05079 .05020 .06020	.007 5.00	CD . 05050 . 06062 . 00506
	AT1 03S1 (C/			N	CL . 15653 . 31620 . 07983	INTERVAL = -5	Ct. . 16416 . 32639 . 08111	" R	CL . 18839 . 35635 . 08398	# RU	Ct. .21087 .36511	INTERVAL = -5.	. 20731 . 37673 . 08471
CA23B	747/1			GRADIENT INTERVAL	07 .05242 .02600 01321	GRADIENT INT	DY . 03261 . 02195 00533	GRADIENT INTERVAL	07 . 04541 . 08552	GRADIENT INTERVAL	07 .06524 .09032	GRADIENT INT	DY 00144 .06742 .03443
DATA -	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN 2C	3.30	MACH .58700 .58651	3.30 6	MACH .58572 .58660	3.29 6	MACH .58806 .58578 00114	3.30 Ө	MACH .58763 .58716 00024	3.30 6	МАСН . 58729 . 5876ч . 00017
TABULATED SOURCE	ARC		1339.	RN/L =	DX 20.00000 20.00000	RN/L	DX 20.00000 20.00000	RN/L .	DX 20.00000 20.000000	RN/L =	0x 20.00000 20.00000	RN/L =	00000 20.00000 20.00000
TABU		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP		10RB 8.00000 8.00000		10RB 8.00000 8.00000		1088 8.00000 8.00000		10R8 8.00000 8.00000		10RB 8.00000 8.00000
IAR 76		REFERE	5500.0000 S 327.7800 1 2348.0400 11		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GRADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC 2.000 4.000 GRADIENT
DATE 22 MAR			SREF = LREF = BREF = SCALE =		# ZQ		z zg		. 20		* 20		• zo

341		5.000 .000 20.000		CBI . 00102 . 00047 00027		CBL .00082 .00063 00010		CBL .00052 .00083 .00015		CBL . 00126 . 00050 00033		CBL . 00059 . 00095
PAGE	DATA	STAB = ELEVON = DX MACH = D		CYN 00189 00149		CYN 00161 00125		CYN 00144 00110		CYN 00117 00093		CYN 00240 00181
(IEXHXI)	PARAMETRIC D	. 000		CY .01068 .01190		CY .01039 .01192		CY . 01025 . 01199		CY . 00996 . 01190		CY . 01234 . 01247 . 00006
	a.	BETA = RUDDER = 10RB = DY		CLM 17745 20895 01575		CLM 19414 22252 01419		CLM 20444 23107 01332		CLM -,21839 -,24511 -,01336		CLM 24082 26754 01341
OATAC GREATA			-5.00/ 5.00	CD . 04711 . 05692	.00/ 5.00	CD . 04859 . 05825 . 00483	-5.00/ 5.00	CD . 04975 . 05919	.00/ 5.00	CD . 05033 . 06012	-5.00/ 5.00	CD .05133 .06108
250	1660		**	CL .13741 .31694 .08976	INTERVAL = -5.	CL .15647 .32978 .08666	ĸ	CL .17216 .33911 .08347	INTERVAL = -5	CL .17844 .34826 .08491	INTERVAL = -5	CL .20063 .36780 .08359
69 (1747 (1747)			GRADIENT INTERVAL	.03430 .11658 .04114	GRADIENT INTE	07 .05331 .08012	GRADIENT INTERVAL	70 .07032 .05234	GRADIENT INT	07 . 0294 ! +050	GRADIENT INT	07 - 07432 - 06357 - 00537
DATA - CA238	4-16UCAR38	00 IN. XC 00 IN. YC 00 IN ZC	3.31 GF	MACH .58478 .58701	3.30 6	MACH . 58600 . 58679 . 00040	3.30 G	MACH .58711 .58647 00032	3.30 6	MACH .58716 .58714	3.29 6	МАСН . 58705 . 58711 . 00003
SOURCE	ARC	= 1339.9000 = .0000 = 190.7500	RN/L =	0X 20.00000 20.00000	RN/L =	20.00000 20.00000 20.00000	RN/L	20.00000 20.00000 20.00000	RN/L =	20.00000 20.00000 20.00000	RN/L =	0X 20.00000 20.000000
TABULATED	E DATA	FT. XMRP YMRP ZMRP		1088 6.00000 6.00000		1088 6.00000 6.00000		1088 6.00000 6.00000		1088 6.00000 6.00000		10RB 6.00000 6.00000
76	REFERENCE DATA	5500.0000 50.327.7800 IN. 2348.0400 IN. 25348.0400		3.500 ALPHAC 2.000 4.000 GRADIENT		7.500 ALPHAC P.000 4.000 GRADIENT		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GRADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT
DATE 22 MAR		SREF = 55 LREF = BREF = 2: SCALE =		• Z0		• Z0		= 20		20		20

PAGE 342	17 OCT 75		20.000 20.000 20.000		CBI CBI .00040 .00033 .00026		CBL .00376 .00108 .0016	17 OCT 75)		00.000 00.000 0000 0000 0000 0000		CBL CBL . 00048 .75 . 00049		CBL . 00050 19 . 00072 52
	_	IC DATA	STAB ELEVON DX MACH		CYN 300253 100262		CYN 000267 500244	_	IC DATA	STAB ELEVON DX MACH		CYN 300299 700275 + .00012		CYN 00263 00219
	(UNHX31)	PARAMETR1C	000. 000. 6.0000.		CY .01193 .01541		CY .01270 .01455	(NEXHND)	PARAMETR1C	.000 .000 .000 .000		CY .01409 .01557 .00074		CY .01321 .01406 .00042
			BETA # RUDDER # 10RB # DY		CLM 24849 27549		CLM 25013 27699 01343	•		BETA = RUDDER = 10RB = DY		CLM 17653 21160 01753		CLM 19315 22717 01701
	0351 (CARRIER DATA)			-5.00/ 5.00	.05161 .05161 .06158	-5.00/ 5.00	CD . 05146 . 06159 . 00507	03S1 (CARRIER DATA)			5.00/ 5.00	CO 96640. 41850.	5.00/ 5.00	CD . 05060 . 05900 . 00420
	AT1 0351 (C				CL .21576 .38199 .08311	INTERVAL = -	CL .21487 .38497 .08505	AT1 03S1 (C			INTERVAL = -	CL .13385 .29325 .07970	INTERVAL = -	CL .14710 .30800 .08045
CA23B	38) 747/1			GRADIENT INTERVAL	70 .09486 .06728	GRADIENT IN	70 02027 02391 100182	747/1		•	GRADIENT IN	DY 07105 01686	GRADIENT IN	DY 03982 04258 00138
DATA -	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3 .30	MACH .58719 .58694 00012	= 3.30	MACH . 58699 . 58709 . 00005	14-120(CA238		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.31	MACH .58780 .58730	3.30	MACH .58691 .58751 .00030
TABULATED SOURCE	ARC		1339.	RN/L	DX 20.00000 20.00000 000000.	RN/L	DX 20.00000 20.00000 .00000	ARC		# 1339.	RN/L	00000. 00000.	RN/L	x0 00000: 00000:
TABU		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP		10RB 6.00000 6.00000		10RB 6.00000 6.00000		REFERENCE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP		10RB 6.00000 6.00000		10RB 6.00000 6.00000
MAR 76		REFERE	5500.0000 S 327.7800 I 2348.0400 I		* 45.000 ALPHAC 2.000 4.000 GRADIENT		* 50.000 ALPHAC 2.000 4.000 GRADIENT		REFERE	5500.0000 S 327.7800 I 2348.0400 I		3.500 ALPHAC 2.000 4.000 GRAD::71		7.500 ALPHAC 2.000 4.000 GRADIENT
DATE 22 MAR			SREF "LREF" BREF "SCALE"		· 20		. 20			SREF "LREF" BREF "SCALE "		• 20		. 20

343	(2/		5.000 .000 .600		CBI .00047 .00067 .00010		CBL . 00007 . 00064 . 00029		CBL . 00048 . 00037 00006		CBL .00076 .00090 .00007		CBL .00081 .00130
PAGE	(17 OCT	DATA	STAB ELLEVON BOX BACH E		CYN 00248 00200 00200		CYN 00200 00155		CYN 00273 00207		CYN 00300 00267 .00017		CYN 00289 00261
	(+EXHNO)	PARAMETRIC D	000.9		CY .01255 .01370 .		CY .01246 .01381 .00068		CY .01363 .01414		CY .01315 .01472		CY .01317 .01491 .00087
		a.	BETA * RUDDER * 10RB * DY		CLM 20062 23464 01701		CLM 21292 24554 01631		CLM 23290 26522 01616		CLM 24186 27316 01565		CLM 24362 27530 01584
	(CARRIER DATA)			-5.00/ 5.00	0000	.00.5 /00.	CD . 05121 . 06031 . 00455	.00/ 5.00	CD .05154 .06121	.00/ 5.00	CD , 05139 , 06127 , 00494	.007 5.00	CD . 051 14 . 061 09
	0351			Ħ	5132 11383 8126	ا ا	CL . 16680 . 32977 . 08149	INTERVAL = -5.	CL . 19004 . 35766 . 08381	INTERVAL = -5	CL .20728 .37494 .08383	INTERVAL = -5	CL . 20776 . 37950 . 08587
8) 747/1 ATI			GRADIENT INTERVAL	70 03324 06070 01373	GRADIENT INTERVAL	DY 05303 07127 00912	GRADIENT INTE	07 03707 08604 02449	GRADIENT INT	70 05594 00547 .05921	GRADIENT INT	07 01817 04602 01392
DATA - CA238	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.30 GR	ACH 58688 58670 00009	3.30 GF	MACH .58673 .58727	3.29 6	MACH .58733 .58712	3.30 G	MACH .58710 .58749	3.30	MACH . 58804 . 58759 00022
SOURCE	ARC 1		= 1339.90 = .00 = 190.75	RN/L =	000000 ·	RN/L *	00000°.	RN/L *	X0 00000. 00000.	RN/L .	00000 · 000000 ·	RN/L =	00000 · · · · · · · · · · · · · · · · ·
TABULATED		E DATA	FI. XMRP YMRP ZMRP		1088 6.00000 6.00000		10RB 6.00000 6.00000		10RB 6.00000 6.00000		10RB 6.00000 6.00000		10RB 6.00000 6.00000
3 75		REFERENCE DATA	5500.0000 SQ.F. 327.7800 IN. 2348.0400 IN.		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GRADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC 2.000 4.000 GRADIENT
22 MAR			H H H N		14				•		*		
DATE			SREF LREF BREF SCALE		20		20		20		20		20

<u>_</u>

DATE

.238 PAGE 344	ARC 14-120(CA23B) 747/1 ATI 02SI (CARRIER DATA) (UNHY10) (17 OCT 75)	PARAMETRIC DATA	
IABULATED SOURCE DATA - CA238	ARC 14-120(CA2)	DATA	
0		REFERENCE DATA	

CBI -. 00061 . 00027 . 00044 CBL .00019 .00076 .00028 CBL .00082 .00117 CBL .00039 .00068 CBL .00062 .00064 .00001 5.000 CYN -.00315 -.00279 CYN -.00307 -.00286 CYN -.00312 -.00263 CYN -.00286 -.00265 CYN -.00282 -.00240 STAB ELEVON DX MACH CY .01377 .01529 .00076 .01351 .01513 .00081 CY .01187 .01368 .00091 CY .01356 .01522 .00083 CY .01233 .01365 .00066 CLM -.05220 -.08870 -.01825 CLM -.08173 -.12009 -.01918 CLM -.10014 -.13970 -.01978 CLM -.12943 -.17018 -.02038 CLM -.18480 -.22163 -.01841 BETA RUDDER 10RB DY 00 5.00 CD . 04389 . 04956 . 00284 CD . 04524 . 05194 . 00335 -5.00/ 5.00 CD .04616 .05352 .00368 00/ 5.00 -5.00/ 5.00 CD .04745 .05536 .00396 CD .04956 .05838 .00441 Ŋ. -5.00/ GRADIENT INTERVAL = -5.00/ Řί Ct. .07905 .23900 .07998 CL. . 09800 . 25908 . 08054 CL .11109 .27278 .08084 CL .1705**8** .33222 .08082 GRADIENT INTERVAL * GRADIENT INTERVAL = GRADIENT INTERVAL GRADIENT INTERVAL 0X -.01267 -.01020 .00124 DX -.02880 -.04969 DX -.03048 -.07336 -.02144 -.02992 -.071**23** -.020**66** DX -.08807 -.11959 -.01576 1339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC MACH . 59631 . 59506 . 00063 МАСН . 59752 . 59802 . 00025 MACH .59633 .59726 .00046 MACH .59503 .59130 .00187 MACH .59637 .59584 .00026 3.33 3.35 3.35 .00000 .00000 .00000 .00000 . 00000 . 00000 . 00000 RN/L RN/L RN/L ,000000. . 00000 . 00000 . 00000 XMRP YMRP ZMRP 10RB 8.00000 8.00000 10R8 8.00000 8.00000 10RB B.00000 B.00000 10R8 8.00000 8.00000 10RB . 00000 . 00000 3.500 ALPHAC 2.000 4.000 GRADIENT 7.500 ALPHAC 2.000 4.000 GRADIENT 5500.0000 327.7800 2348.0400 10.000 ALPHAC 2.000 4.000 GRADIENT 15.000 ALPHAC 2.000 4.000 GRADIENT 30.000 ALPHAC 2.000 4.000 GRADIENT SREF LREF BREF SCALE 20 20 20 20 20

3+5	1 51		5.000 5.000 .000 .600		CBI .00051 .00051		CBL .00056 .00080 .00012	. 75)		5.000 5.000 .000 .600		CBL .00037 .00080		CBL .00071 .00097
PAGE	(17 OCT	DATA	STAB # ELEVON # DX # MACH #		CYN 00279 00258		CYN 00272 05264 .00004	17 001	DATA	STAB = ELEVON = DX MACH =		CYN 00137 00116		CYN 00112 00093
	(UNHY 10)	PARAMETRIC (0000 0000 0000 0000		CY .01234 .01393 .00080		. 01150 . 01388 . 00119	(UNHY 13)	PARAMETR1C	0000.		CY .01048 .01162		CY .00927 .01093 .00083
		u.	BETA BRUDDER BIORB BOY		CLM 20999 24421 01711		CLM 21528 24984 01728			BETA * RUDDER * 10RB * DY		CLM 12782 16208 01713		CLM 14855 18319 01732
	(CARRIER DATA)			-5.00/ 5.00	CD . 05036 . 06006	.00/ 5.00	CD . 05054 . 06027 . 00486	(CARRIER DATA)			-5.00/ 5.00	CD .04765 .05508 .00371	.00/ 5.00	CD . 04873 . 05682 . 00404
	0251			Ħ	CL . 19356 . 35669 . 08156	# ?	CI. . 19706 . 36496 . 08395	0251			H	CL .11831 .37678 .07923	il R	CL .13088 .29320 .08116
œ	1747/1 ATI			GRADIENT INTERVAL	10677 19602 04463	GRADIENT INTERVAL	DX 01444 12143 05349	31 747/1 AT1			GRADIENT INTERVAL	DX 03811 06523 01356	GRADIENT INTERVAL	.01798 04063 02931
DATA - CA238	14-120(CA23B)		00 IN. XC 00 IN. YC 00 IN ZC	3.35 GR	MACH . 59620 . 59522 00049	3.35 GR	MACH . 59459 . 59441 00009	14-120(CA238)		1.9000 IN. XC .0000 IN. YC 1.7500 IN ZC	3.34 G	MACH .59450 .59354 00048	J. 3⊈	MACH . 59261 . 59217
TABULATED SOURCE (ARC 1		= 1339.9000 = .0000 = 190.7500	RN/L =	00000 000000 000000	RN/L =	DX . 00000 . 00000	ARC 1		1339	RN/L *	00000 . 000000 .	RN/L =	00000 · 000000 · 000000 · 000000
TABULA		E DATA	KARP YMRP ZMRP		10RB 8.00000 9.00000		10RB 8.00000 8.00000		CE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP		1088 6.00000 6.00000		10RB 6.00000 6.00000
AR 76		REFERENCE DATA	5500.0000 SQ.FT 327.7800 IN. 2349.0400 IN.		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC 2.000 4.000 GRADIENT		REFERENCE DATA	5500.0000 SQ 327.7800 IN NI 00400 E348.0400		3.500 ALPHAC 2.000 4.000 GRADIENT		- 7.500 ALPHAC 2.000 4.000 GRADIENT
DATE 22 MAR			SREF * LREF * BREF * SCALE *		* 20		. 20			SREF ** LREF ** BREF ** SCALE **		. 20		2 0

PAGE 346	(UNHY13) (17 OCT 75)	PARAMETRIC DATA
	ARC 14-120(CA23B) 747/1 ATI 0251 (CARRIER DATA)	
ABULATED SOURCE DATA - CA23E	ARC 14-120(CA23B)	
76 TAE		REFERENCE DATA

PARAMETRIC DATA	5.000 5.000 .000		CBI . 00057 . 00069		CBL .00049 .00065		CBL .00032 .00073		CBL .00013 .00070	GRADIENT INTERVAL = -5.00/ 5.00	CBL .00072 .00097
	STAB = ELEVON = DX :: MACH =		CYN 00117 00101		CYN 00128 00105		CYN - 00201 - 00203 - 00001		CYN 00223 00221		CYN -,00225 -,0028 -,00002
	000.		CY .00905 .01102		CY .00943 .01123		CY .01105 .01343		CY - 01 146 - 01 354 - 00 104		CY .01134 .01387 .00127
	BETA = RUDDER = 10RB = 0Y	-5.00/ 5.00	CLM 15968 19440 01736	_	CLM 17929 21262 01667	GRADIENT INTERVAL = -5.00/ 5.00	CLM 21208 24369 01581		CLM 22643 25782 01569		CLM 23091 26194 01551
			CD . 04929 . 05743		CD . 05010 . 05856 . 00423		CD . 05106 . 05020 . 00457	-5.00/ 5.00	CD .05140 .06099		CD .05131 .06107 .00488
	5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC 327.7800 IN. YMRP = .0000 IN. YC 2348.0400 IN. ZMRP = 190.7500 IN ZC .0125	INTERVAL = -5	CL . 14 148 . 30254 . 08053		CL . 15116 . 31570 . 08227		CL . 18320 . 34302 . 07991	И	CL . 20250 . 36447 . 08098		CL . 20599 . 37161 . 08281
		GRADIENT INT	0X 01436 07557 03061	MACH DX CL. 5917401436 .15920407557 .3 .0001503051 .0	масн DX .59103 .07807 .5910301760 .0000004784		00 . 00985 08351 04668	GRADIENT INTERVAL	04067 08489 6238		DX 17655 17839 00092
		3.33 (MACH .59174 .59204 .00015			3.35 (MACH .59046 .59064 .00009	3.35	МАСН . 59085 . 59107 . 00011	3.35	MACH .59144 .59135 00004
		RN/L =	00000 ·	RN/L *	00000 .	RN/L =	00000 . 000000 .	RN/L =	DX .00000.	RN/L *	00000 00000 00000
NETENENCE DATA			10RB 6.00000 6.00000		10RB 6.00000 6.00000		10RB 6.00000 6.00000		10RB 6.00000 6.00000		10RB 6.00000 6.00000
			10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GRADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC 2.000 4.000 GRADIENT
	SREF = LREF = BREF = SCALE =		H 20		= 20		2 0		. ZQ		= 2g

347	75)		5.000 5.000 .000 .600		CBI . 00596 . 00726 . 00065		CBL .00545 .00625 .00040		CBL . 00508 . 00527 . 00009		CBL .00391 .00457		CBL .00176 .00186
PAGE	(UNHY18) (17 OCT	PARAMETRIC DATA	STAB = ELEVON = DX = MACH =		CY CYN .0071200777 .0050500721 00104 .00028	CYN 00695 00534		CYN 00618 00433		CYN 00447 00223		CYN . 00035 . 00206	
			.000 ST. .000 ELL 6.000 DX				CY .00790 .00549		CY .00829 .00496 00166		CY .00614 .00335 00139		. 00042 00119
		à	BETA = RUDDER = 10RB = 0Y		CLM 14709 17933 01612		CLM 16225 19619 01697		CLM 17203 20550 01674		CLM 18696 22077 01690		CLM 21737 24867 01565
	9		WL-C	00/ 5.00	CD . 04624 . 05482 . 05482	CD .04624 .05482 .00429	CD . 04782 . 05631 . 00424	.00/ 5.00	CD . 04845 . 05739 . 74400.	INTERVAL * -5.00/ 5.00	05+00. 5+850. 05+00.	00/ 5.00	CD . 05052 . 06059
				4VAL = -5.00/	3000 8845 7922	RVAL = -5.00/	+839 0930 8046 = -5	ΐ	CL .15590 .31659		CL .16899 .33165 .08133	INTERVAL = -5	CL .18923 .35600 .08338
m				GRADIENT INTERVAL	0x -,15123 -,09423 .02850	GRADIENT INTERVAL	. 21204 -, 05023 -, 08091	GRADIENT INTE	DX 18453 08798	GRADIENT INTE	0x 22222 08119 .07051	GRADIENT INTE	DX 18323 12907 02708
DATA - CA23E			00 IN. XC 00 IN. YC 00 IN ZC	3.34 GR	MACH .59076 .59178 .00051	3.34 G	MACH .59084 .58980 00052	3.33 68	MACH .59145 .59157 .00006	3.35 GF	MACH .59100 .59135	3.35	MACH .59185 .59194 .00005
TABULATED SOURCE (ARC 1		1339.9000 2.0000 190.7500	PN/L	DY 10.00000 10.00000	RN/L =	DY 10.00000 10.00000	RN/L ≖	DY 10.00000 10.00000	RN/L #	DY 10 . 00000 10 . 00000	RN/L =	DY 10.00000 10.00000
TABULA	ı,	E DATA	. X X X X X X X X X X X X X X X X X X X		1088 6.00000 6.00000		1088 6.00000 6.00000	10R8 6.00000 6.00000 6.00000 6.00000 6.00000 6.00000 6.00000 6.00000	1088 6.00000 6.00000		8.00000 6.00000 6.00000		
3 76		REFERENCE DATA	5500,0000 SQ.8 327,7800 IN. 2348,0400 IN.		3.500 ALPHAC 2.000 4.000 GRADIENT		7.500 ALPHAC 2.000 4.000 GRADIENT		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GRADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT
DATE 22 MAR			SREF = 55 LREF = 3 BREF = 23 SCALE =		z 20		2 0		2 0		• ZO		• ZO

ARC 14-120(CA23B) 747/1 ATI 0251 (CARRIER DATA)

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CBI .00076 .00117 .00021 CBL .00128 .00105 CBL .00649 .00819 .00085 CBL .00615 .00728 த். நே. 1000 1000 1000 1000 (17 OCT (17 OCT CYN .00036 .00119 CYN -.00023 .00050 CYN -.00790 -.00553 CYN -.00613 -.00361 STAB ELEVON DX MACH STAB ELEVON DX MACH PARAMETRIC DATA PARAMETRIC DATA (UNHY18) (UNHY 19) CY .00438 .00431 -.00003 CY .00600 .00618 .00009 . 00531 . 00212 -. 00160 . 00443 . 00107 -.00168 .000 .000 8.000 CLM -.23024 -.26085 -.01531 CLM -.23167 -.26171 -.01502 CLM -.10092 -.13380 -.01644 BETA RUDDER 10RB DY BETA RUDDER TORB DY ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) GRADIENT INTERVAL = -5.00/ 5.00 CD .05115 .06119 .00502 GRADIENT INTERVAL = -5.00/ 5.00 CD .05087 .06157 .00535 GRADIENT INTERVAL = -5.00/ 5.00 CD .04368 .05171 .00402 GRADIENT INTERVAL # -5.00/ 5.00 CD . 04503 . 05303 . 00400 CL .20623 .37541 .08453 CL .20971 .37967 .08498 CL .08946 .25310 .08182 CL .11295 .27329 .08017 DX -.07926 -.06555 0x -.04244 -.10545 -.03151 DX -.32979 -.20066 .06457 0x -.21857 -.12611 1339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC МАСН . 59090 . 59168 . 00039 1339.9000 IN. XC .0300 IN. YC 190.7500 IN ZC MACH .59017 .59073 .00028 MACH .59043 .59118 .00037 MACH .59062 .59132 .00035 3.35 3.34 3.34 DY 10.00000 10.00000 RN/L 10.00000 10.00000 10.00000 10.00000 .00000 XMRP YMRP ZMRP 10RB 6.00000 6.00000 10RB 8.00000 8.00000 REFERENCE DATA REFERENCE DATA 5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN. 5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN. 3.500 ALPHAC 2.000 4.000 GRADIENT 45.000 ALPHAC 2.000 4.000 GRADIENT 7.500 ALPHAC 2.000 4.000 GRAD:ENT 50.000 ALPHAC 2.000 4.000 GRADIENT SREF LREF BREF SCALE SREF LREF BREF SCALE 70 20 70 20

3+6	15 1		000.00 .000 .000 .000		CBI .00583 .00667 .00042		CBL . 00560 . 00575 . 00008		CBL . 00232 . 00223 00004		CBL .00068 .00144 .00038		CBL .00118 .00133
PAGE	(17 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN 00508 00224 .00142		CYN 00331 00058		CYN .00167 .00384		CYN .00147 .00210		CYN .00079 .00137 .00029
	(UNHY 19)	PARAMETRIC D			. 000407 . 00019 - 00194		CY .00308 00041 00174		CY 00141 00420 00139		CY .00256 .00320		CY .00339 .00463 .00062
		a	BETA ERUDDER BIORB BOY		CLM 12517 16128 01805		CLM 14457 18101 01822		CLM 18940 22511 01786		CLM 21427 24719 01646		CLM 21784 25072 01644
	(CARRIER DATA)			5.00/ 5.00	CD . 04607 . 05388	.00/ 5.00	CD .04688 .05537 .00425	.00/ 5.00	96+00. • 02-936 • 05-936	.00/ 5.00	CD . 05086 . 06034	.00/ 5.00	CD . 05093 . 06080 . 00494
	0251			H	CL .13093 .28962 .07935	11 12	CL .13749 .29740 .07995	INTERVAL = -5	CL .17360 .33954 .08297	INTERVAL = -5	CL . 19973 . 36096 . 08061	ERVAL = -5	CL .20445 .36610 .98080
œ	11 747/1 AT1			GRADIENT INTERVAL	DX 14628 04926 04850	GRADIENT INTERVAL	DX -,16675 -,09205 -,03735	GRADIENT INT	0X 20224 15182 .02521	GRADIENT INT	DX 15893 22385 03246	GRADIENT INTERVAL	DX 10655 12670 01008
DATA - CA238	14-120(CA238		00 IN. XC 00 IN. YC 00 IN ZC	3.33 GF	MACH .59041 .59147 .00053	3.35 G	MACH .59203 .59136	3.35 G	MACH .59188 .59160 00014	3.35 6	MACH .59144 .59169	3.35	MACH .59152 .59150
TABULATED SOURCE DATA	ARC 1		1339.9000 2.0000 190.7500	RN/L =	00000 00000 00000 00000	RN/L =	0X 10.00000 10.00000 .00000	RN/L =	DY 10.00000 10.00000	RN/L =	DY 10,00000 10,00000	RN/L =	00.0000 10.00000 10.00000
TABULA		E DATA	FT. XMRP YMRP. ZMRP		1088 9.00000 9.00000		1088 8.00000 8.00000		1088 8.00000 8.00000		10RB 8.00000 8.30000		10RB 8.00000 8.00000
× 76		REFERENCE DATA	5500.0000 SQ 327.7800 IN 2348.0400 IN		10.000 ALPHAC P.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GRADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC 2.000 4.000 GRADIENT
22 MAR 76			11 H H 11				и		M				•
DATE 3			SREF LREF BREF SCALE		02		20		20		20		20

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TABULATED SOURCE DATA	ARC	REFERENCE DATA	5500.0000 SQ.FT. XMRP = 1339.9000 1 327.7800 IN. YMRP = .0000 1 2348.0400 IN. ZMRP = 190.7500 1	RN/L = 3.	3.500 ALPHAC 10RB DY MA. 2.000 8.00000 .00000 .5 6.0000 9.00000 .00000 .5 6.0000 0.5 6.0000 0.5 6.0000 0.5 6.0000 0.5 6.00000 0.000000	RN/L = 3.	7.500 ALPHAC 10RB DY MACH 2.000 8.00000 .00000 .5865 4.000 8.00000 .00000 .5865 GRADIENT .00000 .00000000	RN/L = 3	ALPHAC 10RB DY MACH 2.000 8.00000 .00000 .5865 4.000 8.00000 .00000 .5855 ADIENT .00000 .00000000	RN/L = 3.3	15.000 10RB DY MACH 2.000 8.00000 .00000 .5870 4.000 8.00000 .00000 .5865 GRADIENT .00000 .000000000	RN/L = 3.2	30.000 ALPHAC 10RB DY MACH 2.000 8.00000 .00000 .5853 4.000 8.00000 .00000 .5555
1 - CA238	14-120(CA23B) 747/1 AT1		IN. XC IN. YC IN ZC	31 GRADIENT	MACH DX .5874615845 .5872320371 .0001202263	30 GRADIENT IN	ласн DX .5869110359 .5865814421 .0001702031	30 GRADIENT IN	ACH DX 5862006370 5859207425 0001400527	30 GRADIENT INTERVAL	1ACH DX .5870408906 .5862313400 .0004102247	9 GRADIENT	MACH DX .5852610707 .5856912752
	0381			INTERVAL = -5.00/	CL . 12018 . 27851 . 07916	INTERVAL = -5.00/	CL . 1284 1 . 28726 . 07943	INTERVAL = -5.0	CL .13229 .29096 .07934	TERVAL = -5.007	CL . 14968 . 30900 . 07966	INTERVAL = -5.00	17624 34524
	(CARRIER DATA)			00/ 5.00	CD . 04751 . 05395 . 00322	00/ 5.00	CD . 04813 . 05527 . 00357	.00/ 5.00	CD . 04845 . 05613	0/ 5.00	CD . 04958 . 05769 . 00405	0/ 5.00	CD . 05028 . 05971
			BETA = RUDDER = 10RB = DY		CLM 11598 14669 01536		CLM 13689 16892 01602		CLM 14976 18367 01696		CLM 17477 20808 01666		CLM 21121 24451
	(UNHY27)	PARAMETR1C			CY .01157 .01010		CY .01020 .01096		CY .00885 .01157		CY .00977 .01273		CY .01129 .01335
PAGE	.00 (1) (7	DATA	STAB ELEVON # DX MACH #		CYN 00095 00077		CYN 00104 00089		CYN 00097 00092		CYN 00157 00147		CYN 00207 00178
350	1 75 1		5.000 .000 .000 .600		CBI 00093 .00072		CBL 00003 .00076		CBL .00082 .00082		CBL .00030 .00055		CBL .00079 .00076

351	75)		יניטט	0000		CBI . 00071 . 00094 . 00011		CBL .00053 .00067 .00007	. 27		5	000.		CBL .00480 .00621		CBL .00401 .00529 .00064	
PAGE	(17 OCT	DATA		SIAB ELEVON # DX MACH #		CYN -,00289 -,00239		CYN -,00290 -,00252) (17 OCT	DATA		ELEVON # DX # MACH #		CYN 00523 00474 .00024		CYN 00412 00267	
	(UNHY27)	PARAMETRIC D		000.8		CY .01302 .01405 .00052		.00064	(UNHY32)	PABAMETRIC		000. 6.000 6.000		CY .00469 .00307 00081		CY .00527 .00285 00121	
		٥٠		BETA = RUDDER = 10RB = DY = 1		CLM 22873 26065 01596		CLM 23158 26410 01626				BETA # RUDDER # 10RB # DY		CLM 18897 22181 01642		CLM 20139 23460 01660	
	RIER DATA)				.00/ 5.00	00000	-5.00/ 5.00	CD . 05052 . 06068 . 00508	(CARRIER DATA)				.00/ 5.00	CD . 04866 . 05759 . 00447	.007 5.00	CD . 04982 . 05865	
	03S1 (CARRIER				* ?-	CL .20103 .36720 .08309	u	CL .19857 .37338 .08740	0351				INTERVAL = -5	CL .13882 .30150 .08134	INTERVAL = -5	CL . 15775 . 31716	
	747/1 ATI				GRADIENT INTERVAL	0x 08663 16527 03932	GRADIENT INTERVAL	DX -,10954 -,16345 -,02695	J 747/1 AT1				GRADIENT INT	DX 05386 08259 01187	GRADIENT INT	DX 11877 05162	
DATA - CA238	Š			00 IN. XC 00 IN. YC 00 IN ZC	3.30 GR/	MACH .58603 .58548 00027	3.30 GR	MACH .58563 .58531 00016	14-120(CA238			300 IN. XC 300 IN. YC 300 IN ZC	3.31 GF	MACH .58674 .58735	3.30	MACH . 58723 . 58724	10000
TABUU ATEN SOURCE D	ں			1339.9000 2 .0000 190.7500	RN/L =	00000 . 00000 .	RN7L .	00000 · 000000 · 000000 · 000000 · 000000	ABC	?		1339,9000 - 0000 190,7500	RN/L =	00.000.01 00.00000.01	RN/L #	10.00000 10.00000	00000.
TABILA		****	£ 6	FT. XMRP YMRP ZMRP		10RB 8.00000 8.00000		10RB 8.00000 8.00000			CE DATA	FT. XMRP YMRP ZMRP		10RB 6.00000 6.00000		10RB 6.00000 6.00000	00000.
Ç C		i	METERENCE DA	5500.0000 50.1 327.7800 IN. 2348.0400 IN.		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC 2.000 4.000 GRADIENT			REFERENCE DATA	5500.0000 SQ 327.7800 IN 2348.0400 IN		- 3.500 ALPHAC 2.000 4.000 GRADIENT		7.500 ALPHAC 2.000 4.000	GRAD: ENT
	טאור כב יואו			SREF = 5 LREF = 6 BREF = 6 SCALE =		• 20		• 20				SREF ** LREF ** BREF ** SCALE **		20		20	

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(UNHY32)	
747/1 ATI 03SI (CARRIER DATA)	
ARC 14-120(CA23B)	

T 75)		. 000 . 000 . 000 . 000		CBI . 00398 . 00474 . 00038		CBL .00304 .00318 .0007		CBL . 00156 . 00176		CBL . 00130 . 00155		CBL . 00081 . 00149 . 00034
(2) (17 OCT	DATA			CYN 00332 00174		CYN 00185 00018		CYN 00011 .00140		CYN 00060 .00019		CYN 00092 00021
(UNHY32)	PARAMETRIC	.000 .000 .000 .000 .000		CY .00520 .00236 00142		CY .00429 .00176 00126		CY .00547 .00332 00107		CY .00726 .00735		CY .00875 .00858 00008
		BETA = RUDDER = 10RB = 0Y		CLM 20900 24018 01559		CLM 22111 25172		CLM 23615 26772 01578		CLM 24385 27342 01478		CLM 24615 27558 01471
(CARRIER DATA)			-5.00/ 5.00	5669	.00/ 5.00	CD .05052 .06001 .00475	5.00/ 5.00	2000	-5.00/ 5.00	CD .05110 .06151	-5.00/ 5.00	CD . 05148 . 05146
AT1 0351 (CA			н	CL . 16112 . 32064 . 07976	# 	CL .17405 .33561 .08078	11	CL .19787 .36178 .08196	¥	cl .21062 .37582 .08260	ı	CL .21650 .37815
747/1			GRADIENT INTERVAL	DX 15591 04941 .05325	GRADIENT INTERVAL	DX 19551 08464 .05543	GRADIENT INTERVAL	DX 18137 13226 .02455	GRADIENT INTERVAL	DX 06798 11714 02458	GRADIENT INTERVAL	0x 02004 04956 01476
RC 14-120(CA23B)		.9000 IN. XC .0000 IN. YC .7500 IN ZC	3.30 G	MACH .59727 .58739 .00006	3.30 6	MACH .58721 .58776 .00027	3.29 (3	MACH .58737 .58771	3.30 GF	MACH .58761 .58806 .0022	3.30 GF	MACH .58823 .58899 .00038
ARC		= 1339 = 190	RN/L =	DY 10.00000 10.00000	RN/L #	DY 10.00000 10.00000	RN/L =	DY 10.00000 10.00000	RN/L =	DY 10.00000 10.00000	RN/L	DY 10.00000 10.00000
	REFERENCE DATA	A. YMRP		10RB 6.00000 6.00000		10RB 5.00000 5.00000		10RB 6.00000 6.00000		10RB 6.00000 6.00000		10RB 6.00000 6.00000
	REFERE	5500.0000 SQ 327.7800 IN 2348.6400 IN		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GRADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC 2.000 4.000 GRADIENT
		SREF = LREF = BREF = SCALE = S		= ZQ		r Za		= 20		* 20		20

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			5.000		CBI . 00103 . 00160 . 00028		CBL .00114 .00181	1 75 1)	5.000 .000 .000 .600		CBL . 00050 . 00050		CBL . 00051 . 00074 . 00011
100	-	DATA	STAB = ELEVON = DX = MACH =		CYN .00041 .00117 .0038		CYN 00037 .00046	(17.001	į	DATA STAB ** ELEVON ** DX ** MACH **		CYN 00298 00275		CYN 00263 00219
1 CC \ (1)		PARAMETR1C	.000 .000 .000 .000 .000		CY .00538 .00554 .00008		CY .00789 .00735 00027	4E AHNO	0.040	.000 .000 .000 6.000		CY .01397 .01555		CY . 01317 . 01401 . 00042
			BETA = RUDDER = 10RB = DY		CLM 23124 26245 01561		CLM 23364 26453 01544			BETA * RUDDER * 10RB * 0Y		CLM 17655 21161 01753		CLM -,19319 -,22720 -,01701
(CABRIER DATA)				-5.00/ 5.00	.05 .05110 .06099	.00/ 5.00	CD .05077 .06073 .00498	RIER DATA)			-5.00/ 5.00	CD . 04993 . 05814 . 00411	00/ 5.00	CD . 05060 . 05900 . 00420
ATI 0351 (CA				INTERVAL = -5	CL .20183 .35477 .08147	INTERVAL = -5	CL .2022 .36827 .08302	1 0351 (CARRIER			u	CL . 13412 . 29326 . 07957	RVAL = -5.	CL . 14724 . 30803 . 08039
747/1				GRADIENT INTE	DX 17007 20028 01511	GRADIENT INTE	10670 16871 03101	B) 747/1 AT1			GRADIENT INTERVAL	0x . 16221 . 00123 08049	GRADIENT INTERVAL	02 -,05405 -,00538
14-120(CA23B)			9000 IN. XC 0000 IN. YC 7500 IN ZC	3.30	MACH .58684 .58661 00012	3.30	масн . 5878ч . 58733 00025	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.31 G	MACH . 58779 . 58730 00024	3.30 G	MACH .58691 .58751
ARC			= 1339. = 190.	RN/L	10,00000 10,00000 10,00000	RN/L #	DY 10.00000 10.00000	ARC		1339.90 100.77	RN/L =	000000 0000000 00000000000000000000000	RN/L =	00000 000000 00000
	REFERENCE DATA	, T	SO.FT. XMRP IN. YMRP IN. ZMRP		10RB 8.00000 8.00000		10RB 8.00000 8.00000		CE DATA	FT. XMRP. YMRP. ZMRP		6.00000 6.00000 6.00000		10RB 6.0000 6.00000 .00000
	REFEREN		5500.0000 SQ 327.7800 IN 2348.0400 IN .0125		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC 2.000 4.000 GRADIENT		REFERENCE DATA	5500.0000 50.1 327.7800 IN. 2348.0400 IN.		3.500 ALPHAC 2.000 4.000 GRADIENT		7.500 ALPHAC 2.000 4.000 GRAD:ENT
			SCALE = .		2 0		2 0			SREF " I PEF " E BREF " E SCALE "		- 20		z zo

URCE DATA - CA238	
TABULATED SOURCE DATA	
DATE 22 MAR 76	

355	(27		5.000 .000 .600		CBI . 00047 . 00069		CBL . 00008 . 00066		CBL .00048 .00038 00005		CBL ,00076 ,00089		CBL .00081 .00131
PAGE	(17 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN 00247 00200 .00024		CYN 00199 00155		CYN 00271 00204		CYN -,00299 -,00267		CYN 00289 00260
	(UNHY34)	PARAMETRIC C	9000.9		CY .01250 .01364 .00057		CY .01241 .01375		CY .01359 .01405 .00023		CY .01313 .01473		CY .01317 .01490 .00087
		u.	BETA RUDDER RIORB RIORB RIORB		CLM 20058 23469 01701		CLM 21299 24559 01630		CLM 23293 26524 01616		CLM 24181 27316 01568		CLM 24353 27532 01589
	RIER DATA)			-5.00/ 5.00	CD .05068 .05952	.007 5.00	CD .05120 .06030 .00455	.007 5.00	CD .05154 .06120	.00/ 5.00	CD . 05139 . 06127	.00/ 5.00	CD .05114 .06108 .00497
	1 0351 (CARRIER			INTERVAL = -5.	CL .15147 .31380 .08116	INTERVAL = -5.	CL . 16694 . 32974 . 08140	INTERVAL = -5	CL .19009 .35764 .08378	INTERVAL5	CL .20728 .37492 .08382	ERVAL = -5	CL .20761 .37933 .08586
æ	1747/1 ATI			GRADIENT INTE	DX .05454 03800 75340	GRADIENT INTE	0X .05004 05659 05332	GRADIENT INT	01989 07747	GRADIENT INT	DX -,12500 -,15488 -,01494	GRADIENT INTERVAL	DX 14372 16752 101190
DATA - CA238	14-120(CA23B)		9000 IN. XC 00000 IN. YC 7500 IN ZC	3.30 GF	MACH . 58688 . 58671 00009	3.30 6	MACH .58673 .58727	3.29 6	MACH .58732 .58712 00010	3.30 6	MACH .58712 .58751	3.30	MACH .58807 .58762 00022
TABULATED SCURCE I	ARC 1		1339.90 100. 190.75	RN/L =	, 00000 00000 00000	RN/L =	00000. 000000.	RN/L *	00000. 00000.	RN/L =	00000 . 00000 . 00000	RN/L =	\$0 00 00 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
TABULA		E DATA	FT. XMRP YMRP ZMRP		10R8 6.00000 6.00000		1088 6.00000 6.00000		10RB 6.00000 6.00000		10RB 6.00000 6.00000		1088 6.00000 6.00000
² 76		REFERENCE DATA	5500.0000 SQ. 327.7800 IN. 2348.0400 IN.		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GRADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC 2.000 2.000 CPADIENT
DATE 22 MAR			SREF = 59 LREF = 5 SCALE = 2		= 20		• ZQ		• 20		• ZQ		• ZO
Ď			R 7 B N		J		_						

ARC 14-120(CA23B) 747/1 ATI 02SI (CARRIER DATA)

(UNHM40) (17 OCT 75)

)	5.000 .000 .000 .000		CBI 00001 .00031		CBL . 00033 . 00044 . 00006		CBL . 00058 . 00028 00015		CBL . 00033 . 00055		CBL . 00076 . 00074 00001
DATA	STAB # ELEVON # DX #		. CYN 00371 00352		CYN 00369 00351		CYN 00380 00348		CYN 00363 00324 .00019		CYN 00304 00238
PARAMETRIC			CY .01594 .01794		CY .01524 .01776 .00126		CY .01596 .01776		CY .01578 .01703 .00062		CY .01431 .01468
	BETA = RUDDER = 10RB = DY		CLM 19230 22674 01722		CLM 20111 23634 01762		CLM 20833 24386 01776		CLM 22213 25350 01568		CLM 23956 27072 01558
		-5.00/ 5.00	9888	.00/ 5.00	. 05130 . 05969 . 009420	.00/ 5.00	CD . 05132 . 06014 . 00441	-5.00/ 5.00	CD . 05164 . 06070 . 00453	.00/ 5.00	CD . 05174 . 06143 . 00485
		H	CL . 15716 . 31648 . 07966	ERVAL = -5	CL . 16132 . 32432 . 08150	INTERVAL = -5	. 16643 .33244 .08301	ıı	CL . 18609 . 34492 . 07942	# &	CL . 20035 . 36455 . 08210
		GRADIENT INTERVAL	07 . 06542 . 00946	GRADIENT INTERVAL	DY .06605 .03934 01336	GRADIENT INT	06764 .0578 01743	GRADIENT INTERVAL	DY 00233 02863 01315	GRADIENT INTERVAL	DY .08508 00038
	. 9000 IN. XC . 0000 IN. YC . 7500 IN ZC	1.98	0X -,00100 -,06036 -,02968	1.98	0x 05171 06693 00761	1.98	0x 03693 09867 -03087	1.98 6	0x 05021 03167 0052	1.97 64	. 06702 - 10134 - 08418
	1339	RN/L =	1088 3.82899 3.89292	RN/L =	10RB 3.88061 3.90405	RN/L	1088 3.89369 3.90017 00324	RN/L =	10RB 3.86868 3.89895 .01514	PN/L =	10RB 3.91759 3.92559
REFERENCE DATA	SO.FT, XMRP IN. YMRP IN. ZMRP		MACH .60000 .60000		MACH . 50000 . 50000		MACH . 60000 . 00000		MACH .60000 .60000		МАСН . 60000 . 60000
REFERE	5500.0000 SO 327.7800 IN 2348.0400 IN		3.500 ALPHAC 2.000 4.000 GRADIENT		7.500 ALPHAC 2.000 4.000 GRADIENT		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GRADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT
	SREF LREF BREF SCALE **		. 20		¥ 20		2 0		• ZQ		. 20

PAGE 357	17 001 75)		000 °C		CYN CBI 00286 .00002 00244 .00056		CYN CBL 0028200039 00253 .00051	(17 OCT 75)		5.000 000.5 000.		CYN CBL 00343 .00009 00332 .00031		CYN CBL 00354 .00009
) (DHWHND)	PARAMETRIC DATA	.000 STAB .000 ELEVON 4.000 DX .000 MACH		CY CY .014240		CY CY CY CY	CI HWHND)	PARAMETRIC DATA	.000 STAB .000 ELEVON 4.000 DX .000 MACH		CY C'		CY CY
		u	BETA # RUDDER # 10RB # 0Y #		CLM 24581 27937 01678		CLM 24769 28172 01702			BETA = RUDDER = 10RB = DY		CLM 17970 21954 01998		CLM 19469
	(CARRIER DATA)			.00/ 5.00	CD . 05158 . 06182	.00/ 5.00	CD . 05155 . 06194 . 00519	(CARRIER DATA)			5.00/ 5.00	CD .04961 .05826 .0432	5.007 5.00	.05060
	AT1 0251 (CA			INTERVAL = -5.	CL . 20494 . 38112 . 08809	ERVAL = -5	CL .20733 .38679 .08973	AT1 0251 CCA			INTERVAL = -5	CL .14508 .31153	i ti	CL .16710
æ	1/27/1			GRADIENT INT	07 .05138 .00599 02569	GRADIENT INTERVAL	01 . 01755 00239 00997	1/247/1			GRADIENT INT	07 13589 15274 00658	GRADIENT INTERVAL	DY 14206
DATA - CA238	14-120(CA23B)		.9000 IN. XC .0000 IN. YC .7500 IN ZC	1.97	DX 14608 18392 01692	1.97	DX 25222 19897 02662	14-120(CA23B		9000 IN. XC .0000 IN. YC .7500 IN ZC	1.98	DX 08435 06208	1.98	DX 10309
TABULATED SOURCE	ARC		= 1339 = 190	RN/L =	10RB 3.90866 3.89777	RN/L =	10RE 3.89561 3.89339 00611	ARC		1339.	RN/L =	10RB 4.00537 3.94275 03131	RN/L =	10R8 4.01 <i>2</i> 82
TABUL		CE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP		MACH .60000 .00000		MACH .60000 .60000		REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP		МАСН . 50000 . 50000		MACH .50000
MAR 75		REFERENCE DAT	5500.0000 SQ 327.7800 IN 2348.0400 IN		= 45.000 ALPHAC 2.000 4.000 GRADIENT		* 50.000 ALPHAC 2.000 4.000 GRADIENT		REFEREN	5500.0000 327.7800 2348.0400		3.500 ALPHAC 2.000 4.000 GRADIENT		* 7.500 ALPHAC 2.000
DATE 22			SREF = LREF = BREF = SCALE =		20		20			SREF "LREF" BREF "SCALE "		20		20

PAGE 358	(UNHM41) (17 OCT 75)	ATAC CLATTEMACAC
	ARC 14-120(CA23B) 747/1 ATI 02SI (CARRIER DATA)	
CARSE CARSE	ARC 14-120(CA23B)	REFERENCE DATA

	ຄ. 000 000 000 000 000 000		CBI . 00081 . 00092		CBL 000047 .00045		CBL .00024 .00075		CBL . 00071 . 00081		CBL .00072 .00071
DATA	STAB = ELEVON = DX = MACH =		CYN 00337 00318		CYN 00345 00310		CYN 00295 00266		CYN 00270 00256		CYN 00268 00256
PARAMETR (C	0000.		CY .01599 .01825		CY .01669 .01841 .00086		CY .01613 .01757		CY .01501 .01790		. 01476 . 01821 . 00172
	BETA = RUDDER = IORB = DY		CLM 19831 23511 01840		CLM 21161 24739 01789		CLM 23202 26480 01639		CLM 24070 27346 01638		CLM 24355 27638 01642
		-5.00/ 5.00	CD . 05008 . 05927 . 00459	-5.00/ 5.00	. 05118 . 05009 . 00446	5.00/ 5.00	.05102 .05102 .05040	-5.00/ 5.00	.05084 .05084 .0508	-5.00/ 5.00	. 05098 . 05116
		H	CL . 16919 . 32421 . 07751	et	CL . 18186 . 34126 . 07970	ie	CL .20146 .36262 .08058		CL .21859 .38063 .08102		CL . 22516 . 38783 . 08133
		GRADIENT INTERVAL	DY 12361 13841 00740	GRADIENT INTERVAL	DY 10725 09299	GRADIENT INTERVAL	0Y 11765 12827 00531	GRADIENT INTERVAL	DY 09718 14783 02532	GRADIENT INTERVAL	DY 08635 14681 03023
	. 9000 IN. XC .0000 IN. YC . 7500 IN ZC	1.98	DX 15398 07332	1.98	DX 15015 07892 03561	1.97	00.000 00.000 00.000.	1.97 G	DX 07934 09778 	1.97 6	DX 08686 12072 01693
	1339	RN/L #	10RB 4.0652B 3.96079 05224	RN/L =	10RB 4.05645 3.95781 04932	RN/L .	10RB 4.04280 3.95916 04182	RN/L	10RB 4.01317 3.94777 03270	RN/L =	10RB 3.99721 3.94057 02832
	ZMRP ZMRP ZMRP		МАСН • 50000 • 00000		MACH : 50000 : 500000		MACH . 50000 . 50000		MACH . 50000 . 50000		MACH .50000 .00000
	5500.0000 50 327.7800 IN 2348.0400 IN		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GRADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT		45,000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC 2.000 4.000 GRADIENT
	SCALE **		20		- 20		. ZO		. 20		- 20

⋖	MAR 76	TABULATED	S	URCE DATA - CA238 ARC 14-120(CA238)	38 8) 747/1 ATI	0251	(CARRIER DATA)		(CNHH42)	PAGE (2) (17 OCT	2359
REF	REFERENCE DATA	DATA	- -					•	PARAMETRIC	, ATA	
5500.0000 327.7800 2348.0400	2008 N. N.	T. XMRP YMRP ZMRP	1339.9000 0000 190.7500	00 IN. XC 00 IN. YC 00 IN ZC				BETA REUDOER TORB DY	00000	STAB ELEVON BOX	
			RN/L .	1.98 G	GRADIENT INTE	INTERVAL = -5.	-5.00/ 5.00				
3.500 ALPHAC 2.000 4.000 GRADIENT	3.500 ALPHAC 2.000 4.000 RADIENT	.30000 .30000 .00000	10RB 3.95366 3.93590 01388	DX 01826 00129	DY 01679 02787 00554	CL . 16892 . 32590 . 07849	CD . 05259 . 05078 . 00409	CLM 17962 22155 02097	CY . 02202 . 02441 . 00119	CYN 00330 00321	CBL . 00020 . 00026
			RN/L	1.98	GRADIENT INTE	INTERVAL5.	.007 5.00				
7.500 ALPHAC 2.000 4.000 GRADIENT	.500 ALPHAC 2.000 4.000 ADIENT	MACH .30000 .30000	10RB 3.99447 3.98402 05522	0X -, 06493 -, 07572 -, 00539	07 04520 02685 .00917	CL . 18667 . 33465 . 07399	CD .05300 .06128	CLH 19262 23160 01949	CY .02164 .02491	CYN 00311 00333	CBL .00069 .00068
			RN/L	1.98	GRADIENT INTE	INTERVAL5.	00/ 5.00				
10.000 ALPHAC 2.000 4.000 GRADIENT	.000 ALPHAC 2.000 4.000 ADIENT	.30000 .30000 .00000	1088 3.95201 3.99449 .02124	0X 00117 08873 04378	01635 04987 01676	CL .18180 .33783 .07802	.05316 .05316 .00400	CLM 20002 23713 01856	CY .02366 .02349 00008	CYN 00343 00305	CBL 00040 .00065
			RN/L .	ו.99 ה	GRADIENT INTE	INTERVAL = -5.	00/ 5.00				
15.000 ALPHAC 2.000 4.000 GRADIENT	.000 ALPHAC Z.000 4.000 ADIENT	MACH .30000 .00000	10RB 4.00542 3.96126 02208	0X 07846 04327 01759	DY -, 02784 -, 03544 -, 00380	CL . 19109 . 35308 . 08100	CD .05330 .06184	CLM 21025 24895 01935	CY . 02234 . 02495	CYN 00315 00308	CBL . 00044 . 00036 00009
			RN/L	1.97	GRADIENT INTERVAL		.00/ 5.00				
30.000 ALPH 2.0 4.0 GRADIE	30.000 ALPHAC 2.000 4.000 GRADIENT	.30000 .30000 .00000	10RB 4.02939 3.97963	11489 07696 0.01896	07 03594 04474 00440	CL .20589 .37151 .08231	CD .05340 .06232	CLM -,22945 -,26699 -,01877	CY .02256 .02410	CYN 00295 00264	CBL .00032 .00017

361	. 25	•	-1.000 5.000 .600		CBL 00085 00116 00103		CBL 00089 00111 00101		CBL 00095 00118 00119		CBL 00087 00109 00113		CBL
PAGE	17 001	DATA	STAB = ELEVON = DX = MACH =		CYN . 00100 . 00068 . 00066		CYN .00102 .00091 .00066		CYN . 00100 . 00086 . 00049		CYN .00092 .00075 .00043		CYN . 00086 . 00083 . 00043
	(NAHOOB)	PARAMETRIC [000.9		. 00239 . 00134 . 00290		CY .00269 .06268 .00327		CY . 00226 . 00305 . 00305		CY .00176 .00174 .00266		CY .00154 .00182 .00258
		_	BETA RUDDER 1		CLM .01176 .02080 .02724		. 01011 . 01906 . 02584 . 00393		CLM .00775 .01703 .02308		CLM .00632 .01523 .02121		CLM .00616 .01485 .02060
	(ORBITER DATA)			-5.00/ 5.00	CD .07151 .08041 .09571	.00/ 5.00	CD .07238 .08146 .09742	.00/ 5.00	CD . 07406 . 08412 . 10132	.00/ 5.00	CD . 07525 . 08573 . 10447	.00/ 5.00	CD . 07547 . 08629 . 10491
	0251				CL .28895 .34925 .41402	INTERVAL = -5	CL .28632 .34861 .42038	INTERVAL = -5	CL 28526 .35905 .43664 .03785	INTERVAL = -5	CL 28293 .36228 .45028	INTERVAL = -5	CL .28567 .36357 .45185
9	11 1/747 (E			GRADIENT INTERVAL	07 -,53535 -,47390 -,41868	GRADIENT INT	07 -,47798 -,34585 -,40137	GRADIENT INT	07 -, 40582 -, 33416 -, 40864 -, 00070	GEADLENT INT	07 47401 48236 52115	GRADIENT INT	DY -,53060 -,45502 -,48963 -,01024
DATA - CA23B	14-120(CA238)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	3.35 G	0x 15116 .03752 02591	3.35 6	0.09969 09969 06179	3.35 6	0x 09209 00780 10720	3.34 6	00 07540 16935 16935	3.33	04229 . 15767 - 1505 - 16098
SOURCE	ARC		1109	RN/L *	MACH .59202 .59301 .59058 00036	RN/L .	MACH .59255 .59219 .59101 00038	RN/L .	MACH .59159 .59155 .59167 .00002	RN/L =	MACH .59230 .59324 .593455	RN/L =	MACH . 59329 . 59239 . 59204 00031
TABULATED		CE DATA	FT. XMRP YMRP ZMRP		6.00000 6.00000 6.00000		1078 6.00000 6.00000 6.00000		1088 6.00000 6.00000 6.00000		1088 6.00000 6.00000 6.00000		1088 6.00000 6.00000 6.00000
MAR 76		REFERENCE DAT	2690.0000 SQ. 474.8100 IN 936.6800 IN		10.000 ALPHAC .000 2.000 4.000 GRADIENT		15.000 ALPHAC .000 2.000 4.000 GRADIENT		30.000 ALPHAC .000 2.000 4.000 GRADIENT		45.000 ALPHAC .000 2.000 4.000 GRADIENT		ALPHAC ALPHAC .000 2.000 4.000 GRADIENT
DATE 23 MA			SREF * 6 LREF * BREF * SCALE *		• 20		. 20		. 20		. 20		. 20

CA23B
t
DATA
SOURCE
TABULATED

3E 362	1 22 1		5.000 5.000	. 600	CBL 00057 00021		CBL000730005300054		CBL 00100 00074 00066	9	CBL0010200101		CBL 00124 00011 00063
PAGE	.30 (11) (6	DATA	STAB ELEVON DX	HACH	CYN .00105 .00064	1 3000 .	CYN .00087 .00067		CYN .00090 .00078 00009		CYN .00068 00043		CYN .00068 .00033 00035
	E00HNV)	PARAMETR1C	000. 000. 8	000 -	CY . 00468 . 00455 . 00519		CY .00396 .00548 .00548		CY . 00344 . 00579 . 00559		CY . 00243 . 00316 . 00546	•	CY . 00249 . 00378 . 00577 . 00082
	_		BETA RUDDER BIORB	5	CLM .02127 .02781 .03390		CLM . 01856 . 02612 . 03199		CLM .01898 .02491 .03068		CLM .01744 .02354 .02880 .00284		CLM . 01550 . 02129 . 02602
	(ORBITER DATA)			5.00/ 5.00	CD .08390 .09996 .12278	· 00	CD	.007 5.00	CD .0840 .1002 .1258	00.7 00.	00 0846 1008 1274 0106	.00/ 5.00	CD . 08659 . 10428 . 13387 . 01182
	AT1 0251 (0			INTERVAL = -5.	CL .39564 .46578 .52598 .03258	TERVAL = -5	CL . 39569 . 46036 . 53183 . 03403	INTERVAL = -5	8692 5528 3670 3745	INTERVAL = -5	8362 5715 3951 3897	INTERVAL5.	CL . 38623 . 46621 . 56267 . 04411
	38) 747/1			GRADIENT IN	DY -,28840 -,55882 -,58163	GRADIENT INTERVAL	07 -,46973 -,49652 -,53884 -,01728	GRADIENT INT	DY 48612 43816 53020	GRADIENT INT	07 39780 46944 53470 03422	GRADIENT INT	07 52196 42881 53052
DATA -	. 14-120(CA23B)			≖ 3.3↓	DX -1.54849 75094 .01750	3.35 (DX -2.01103 37391 02504	3.35	DX 07935 05658 05430	3.35 6	0x 18171 01052 09143	3.35 G	0x 13688 10129 13779 00023
HABULATED SCURCE	ARC		1109	RN/L	MACH . 58956 . 59001 . 59111	RN/L	MACH .58981 .59113 .59117	RN/L .	MACH . 59127 . 59204 . 59073	RN/L	MACH . 59244 . 59188 . 59315	RN/L .	MACH . 59222 . 59137 . 59137
Ď -		\$	50.F1. XARP IN. YARP IN. ZARP		8.00000 8.00000 8.00000 8.00000		9.0000 8.00000 8.00000 9.00000		8.00000 8.00000 8.00000 9.00000		1088 8.00000 8.00000 9.00000		1088 8.00000 8.00000 8.00000 0.00000
•		אבו באנ	36.6800 .0125		3.500 ALPHAC .000 2.000 4.000 GRADIENT		7.500 ALPHAC .000 2.000 4.000 GRADIENT		10.000 ALPHAC .000 2.000 4.000 GRADIENT		15,000 ALPHAC .000 2,000 4,000 GRADIENT		30,000 ALPHAC .000 2,000 4,000 GRADIENT
!		7900	BREF SCALE	ä	70		• 20		2 0		20		,

PAGE 363	(VNH009) (17 OCT 75)	PARAMETRIC DATA	.000 STAB = -1.000 .000 ELEVON = 5.000 8.000 DX = .000 .000 MACH = .600		CY CYN CBL .00262 .0007300115 .00333 .0002600097 .005020003100079 .0006000026		CY CYN CBL .00281 .0007200119 .00334 .0002000111 .004570004700073	(VNH010) (17 OCT 75)	PARAMETRIC DATA	.000 STAB = 5.000 .000 ELEVGN = 5.000 8.000 DX = .000 .000 MACH = .600		CY CYN CBL .00454 .0010100125 .00401 .0003500132
		PAR	BETA RUDDER LOOPER LOOP		CLM .01363 .01951 .02353		CLM . 01369 . 02278 . 00227		PAR	BETA = RUDDER * 10RB = DY = 1		CLM . 02338 . 02802
	(ORBITER DATA)			-5.00/ 5.00	CD .08760 .10565 .13736	-5.00/ 5.00	CD .08811 .10625 .13800	(ORBITER DATA)			-5.00/ 5.00	CD . 08360 . 10105
	0251				CL .38116 .46793 .57321 .04801	9î	CL .38467 .47247 .57618	0251			INTERVAL5	CL .40170 .46638
-	747/1 AT!			GRADIENT INTERVAL	DY 55849 45491 45507	GRADIENT INTERVAL	DY 52363 48819 46192	1747/1 ATI			GRADIENT INTE	. 39993 . 1214 . 71214
DATA - CA238	14-120(CA23B)		00 IN. X0 00 IN. Y0 00 IN. Z0	3.34 GR	0X 04829 15068 15068	3.33 GR	0x 00194 01316 09422 02307	14-120(CA23B)		00 IN. XO 00 IN. YO 00 IN. ZO	3.33 68	0X 14459 03459
TABULATED SOURCE (ARC 1		1109.0000 00000 375.0000	RN/L =	MACH .59197 .59243 .59178	RN/L .	мсн .59188 .59167 .59268 .00020	ARC 1		1109.0000 - 0000 - 375.0000	RN/L =	MACH . 59528 . 59463 . 59120
TABULA		E DATA	FT. XMRP YMRP ZMRP		1048 9.00000 9.00000 8.00000		1088 8.00000 8.00000 8.00000		E DATA	FT. XMRP YMRP ZMRP		1088 8.00000 8.00000
23 MAR 76		REFERENCE DATA	2690.0000 SO.1 474.8100 lN. 936.6800 lN.		# 45.000 ALPHAC .000 E.000 4.000 GRADIENT		* 50.000 ALPHAC .000 2.000 4.000 GRADIENT		REFERENCE DATA	2690.0000 SQ.F. 474.8100 IN. 936.6800 IN.		3.500 ALPHAC .000 2.000
DATE 23			SREF = LREF = BREF = SCALE =		20		20			SREF = LREF = BREF = SCALE =		2 0

364 364	OCT 75)		5.000 .000 .000		CBL 00112 +.00104 00074		CBL 00100 00074 00050		CBL 00116 00105 00087		CBL 00126 00105 00074		CBL 00122 00078 00087
PAGE	(17	DATA	STAB ELEVON DX		CYN .00089 .000043 00027		CYN .00087 .00054 .00033		CYN .00073 .00034 00038		. 00068 . 00015 00045		CYN .00064 .00019 00037
	(VNH010)	PARAMETR1C	000.8		CY . 00349 . 00390 . 00515		CY .00291 .00396 .00532		CY .00241 .00490 .00490		. 00178 . 00310 . 00399		. 00167 . 00350 . 00382 . 00382
			BETA RUDDER I 10AB I DY		CLM .02119 .02634 .03153		CLM ,01947 ,02514 ,03018		CLM . 01834 . 02370 . 02848		CLM . 01613 . 02148 . 02569		CLM .01507 .02371 .00215
	(ORBITER DATA)			5.00/ 5.00	CD . 08465 . 10196 . 12793	000/ 5.00	CD . 08523 . 10259 . 12984	.007 5.00	CO . 0858 . 1034 . 1315	.00/ 5.00	. 106 136 136	.00/ 5.00	CD . 08839 . 10840 . 13991 . 01288
	0251			*	CL . 39869 . 46891 . 54590 . 03680	INTERVAL = -5	CL .39577 .47103 .55078	INTERVAL = -5	9708 7153 554 1 3958	INTERVAL = -5	CL .39814 .48257 .57413 .04400	INTERVAL = -5.	CL . 39755 . 49091 . 58585
1111				GRADIENT INTERVAL	DY 08072 .11391 .13091	GRADIENT IN	07 -,40700 -,40185 -,29551 78750.	GRADIENT INT	DY 36917 40978 01015	GRADIENT INT	07 51761 47056 46531	GRADIENT INT	DY 43686 47721 47170
14-120c1-41			. 0000 IN. XO . 0000 IN. YO . 0000 IN. ZO	3.32	0X 13105 03201 05084 .02005	= 3.32 (0X 14457 02622 07409	3.32	DX 13299 02739 07079	3.33 6	0x 10394 08286 11834 00360	3.33 G	DX 10371 10516 19518 02287
ARC			375	RN/L	MACH .59524 .59624 .59500	RN/L .	MACH . 59458 . 59782 . 59872 . 00091	RN/L	MACH . 59642 . 59651 . 59755	RN/L	MACH .59671 .59659 .59605	RN/L	MACH .59578 .59641 .54539 00010
	REFERENCE DATA				8.00000 8.00000 8.00000 8.00000		1088 8.00000 8.00000 8.00000		10RB 8.00000 8.00000 8.00000		1088 8.00000 8.00000 0.00000		9.0000 8.00000 8.00000 9.00000
	REFERE	יש ישער הפאל	74.8100 1 36.6800 1		ALPHAC ALPHAC 2.000 2.000 4.000 GRADIENT		10.000 ALPHAC .000 2.000 4.000 GRAD : ENT		15.000 ALPHAC .000 2.000 4.000 GRAD [ENT		30.000 ALPHAC .000 2.000 4.000 GRADIENT		45.000 ALPHAC .000 2.000 4.000 GRADIENT
		SREF	REF #				20		. 20		. 20		. 20

365	1 75)		5.000 5.000 600 600		CBL 00112 00087 00075	1 75)		-1.000 5.000 .000 .600		CBL 00070 00061 00068		CBL 00070 00081 00085
PAGE	130 (17 007	DATA	STAB # ELEVON # DX MACH #		CYN . 00068 . 00020 - 00038	130 C17 0CT	DATA	STAB = ELEVON = DX = MACH =		CYN .00104 .000111 .00095		CYN . 00117 . 00111 . 00111
	(VNHO 1 0)	PARAMETRIC		,	CY .00159 .00351 .00395	(VNHD11)	PARAME TRIC	00000		.00271 .00307 .00307 .00001		CY .00282 .00286 .00351
			BETA RUDOER RUDOER RUDOER RUDORB		CLM . 01439 . 01928 . 02312			BETA ** RUDDER ** 10R8 ** DY **		CLM .01110 .01691 .02408		CLM .00828 .01423 .02153
	(ORBITER DATA)			-5.00/ 5.00		(ORBITER DATA)			-5.00/ 5.00	CD .06138 .06643 .07438	-5.00/ 5.00	CD .06179 .06739 .07568
	0251			INTERVAL5	CL .39498 .48703 .58921 .04856	AT1 0251 (OR				CL 18458 24155 29814 02839	11	CL .19032 .24803 .30591 .02890
Ω	11 747 II ATI			GRADIENT INTE	DY 44117 48167 53064 02237	747/1			GRADIENT INTERVAL	DY 17585 18204 19776	GRADIENT INTERVAL	DY -,11285 -,22680 -,22635 -,02837
DATA - CA23B	14-120(CA23B)		.0000 IN. XO .0000 IN. YO .0000 IN. ZO	3.32 6	DX 01092 00946 12097 02751	14-120(CA23B)		.0000 IN. YO	3.34 G	0X 09487 03266 08058	3.35 64	X0 - 21947 - 45701. - 46560.
TABULATED SOURCE	ARC 1		1109	RN/L =	MACH . 59362 . 59473 . 59456 . 00023	ARC 1		1109.	RN/L =	MACH .59330 .59263 .59218	RN/L =	MACH .59408 .59178 .59253
TABUL		CE DATA	I.FT. XMRP I. YMRP I. ZMRP		9.00000 9.00000 9.00000		CE DATA	L.FT. XMRP I. YMRP I. ZMRP		1088 4.00000 4.00000 2.00000		10RB 4.00000 4.00000 1.00000
4R 76		REFERENCE DATA	2690.0000 SQ. 474.8100 IN. 936.6800 IN.		50.000 ALPHAC .000 2.000 4.000 GRADIENT		REFERENCE DATA	2690.0000 SQ 474.8100 IN 936.6800 IN		3.500 ALPHAC .000 2.000 4.000 GRADIENT		7.500 ALPHAC .000 2.000 4.000 GRADIENT
DATE 23 MAR			SREF = 6 LREF = BREF = SCALE =		• 20			SREF LREF BREF SCALE		• ZO		Z 0.

ARC 14-120(CA23B) 747/1 ATI 02SI (ORBITER DATA)

0CT 75)		5.000 5.000 .000	000	ã	- 00082 - 00081 - 00093			CBL 00091 00082 00093			CBL 00107 00098 00113	00002		CBL e@tg1				CBL 00096	10000
(17	4140			2	. 00124 . 00103			. 00134 . 00130 . 00111	90000		. 00120 . 00102 . 00100	00 305		CYN .00108	.0000. 			CYN . 00106	.00096 00000
C VNHO 1	PARAMETRIC	000.7		5	.00341 .00305 .00310			.00367 .00340 .00321	3		. 00280 . 00213 . 00213	10000.		CY .00218	. 00259			. 00203	.00014
_		BETA RUDDER IORB	;	CLM	.00680 .01297 .02055 .00344			CLM .00492 .01140 .01977			CLM .00226 .00921 .01803	. 00 . 394		CLM .00058	. 00401			CLM .00016	.01632
(ORBITER DATA)			5.00 %	י ס	.06223 .06803 .07631	.00/ 5.00	i	CD . 06314 . 07779 . 00359	ò		CD . 06502 . 07195 . 08167	91,500.	י	. 06644 . 077 704	64400 ·	00/ 5.00	İ	CD . 06700 . 07396	. 08522 . 00456
AT1 0251 (O			INTERVAL .		.19093 .25074 .30882 .02947	INTERVAL = -5.	l	CL .19260 .25400 .31615	ERVAL = -5		CL .19275 .26263 .33510	ď	1	CL .19290 .27317	.35252	INTERVAL5.		CL .19283 .27704	.35823
38) 747/1			GRADIENT IN		121/18 23642 24334 02154	GRADIENT IN	i	0Y 15853 23552 20103 01063	GRADIENT INTERVAL	į	. 16001 23880 23698 01924	GRADIENT INT		DY - , 23397 - , 23003	24929	GRADIENT INTE	ä	25594 29421	20810 01196
14-120(CA23B)		0000 IN. YO 0000 IN. YO 0000 IN. ZO	3.35		. 1468 . 07409 . 01922	3.35	à	12417 01486 13120	3.35 6	2	13025 13397 12946 .00020			07478 21255 2	01801	3.33 06	ž	06283 24187	-, 1,550 -, 02817
ARC		1109.	RN/L	MACH	. 59162 . 59183 00033	RN/L	2	. 59363 . 59363 . 59510 . 00037	RN/L	ž	. 595 35 . 594 66 . 593 89 . 593 89	RN/L	2	37326 57326	41000	RN/L	X X	. 59237	\$8000.
	W.E. UA!A	SO.FT. XMRP IN. YMRP IN. ZMRP		10RB	#.00000 . 000000		1088	4.00000 4.00000 4.00000		1088	000000		8001	000000 00000 00000	00000		1088	4.00000 1.00000 1.00000	00000
900	יבי בענ	2690.0000 S 474.8100 II 936.6800 II		10.000 ALPHAC .000	2.000 4.000 GRAD (ENT		15.000 ALPHAC	. 000 2. 000 4. 000 GRADIENT		30.000 ALPHAC	.000 2.000 4.000 GRADIENT		45.000 ALPHAC	000 S	GRADIENT		50.000 ALPHAC	€.000 €.000 €.000	GRADIENT
		SREF LREF BREF SCALE =		. 20			* 20			• ZO			- 20				• ZO		

£ 367	1 75 1		5.000 5.000 600		CBL		CBL 00046 00059 00057		CBL 00061 00059 00072		CBL 00057 00071 00085		CBL 00101 00095 00097
PAGE	1) (17 001	DATA	STAB = ELEVON = DX = MACH =		CYN .00101 .00106 .00081		CYN .00111 .00104 .00078		CYN ,00122 ,00094 ,00073		CYN .00106 .00092 .00064		CYN .00101 .00085 .00065
	(VNH013)	PARAMETRIC	000. 000. 6.000.		CY .00186 .00293 .00268		CY .00206 .00237 .00234		. 00243 . 00184 . 00246		CY .00199 .00184 .00284		CY .00211 .00182 .00299
			BETA ** RUDDER ** 10RB ** DY **		CLM .01711 .02524 .03232 .00380		CLM .01390 .02250 .02940		CLM .01306 .02188 .02863		CLM .01167 .02019 .02694		CLM .00957 .01849 .02476
	(ORBITER DATA)			.00/ 5.00	. 07128 . 08002 . 09443	.00/ 5.00	00 . 07151 . 08048 . 09567	.00/ 5.00	00 . 03176 . 08063 . 09609	.00/ 5.00	CD .07232 .08195 .09760	00/ 5.00	CD .07378 .08407 .10127
	AT1 0251 (OR			# L	CL . 29838 . 35121 .41304 .02866	INTERVAL = -5	CL .29525 .35221 .41977	ERVAL = -5	CL .29537 .35337 .42175 .03160	INTERVAL = -5	CL . 29399 . 35515 . 42557 . 03290	INTERVAL = -5	CL .29519 .36502 .44301 .03695
38	747/1			GRADIENT INTERVAL	DY -,52888 -,45886 -,53850 -,00240	GRADIENT INT	07 -,42355 -,49988 -,51321	GRADIENT INTERVAL	07 -,44808 -,58353 -,59846	GRADIENT INT	07 - 47005 - 49785 - 52853	GRADIENT INT	0Y 45772 53834 50667
DATA - CA238	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	3.33 G	0x -,02265 -,03416 -,06456 -,01048	3.32 6	0.03504 0.03504 0.03940 0.03663	3.32 6	0x 18620 00336 07451	3.32	DX 11819 09841 01302	3.33	DX 13369 08049 01330
ATED SOURCE	ARC		1109.	RN/L	МАСН . 59330 . 59492 . 59380	FN/L	MACH .59143 .59273 .59233	RN/L	. 5914 . 59173 . 59203	FR/L =	MACH .59111 .59100 .00004	RN/L .	HACH . 59008 . 59033 . 59000.
TABULATED		CE DATA	50.FT. XMRP IN. YMRP IN. ZMRP		6.00000 6.00000 6.00000		1008 6.00000 6.00000 0.00000		1088 6.00000 6.00000		1088 6.00000 6.00000		1088 6.00000 6.00000 6.00000
1R 76		REFERENCE	2690.0000 SQ 474.8100 IN 935.6800 IN		3.500 ALPHAC .000 2.000 4.000 GRADIENT		7.500 ALPHAC .000 2.000 4.000 GRADIENT		10.000 ALPHAC .000 2.000 4.000 GRADIENT		15,000 ALPHAC .000 2.000 4.000 GRADIENT		30.000 ALPHAC .000 2.000 4.000 GRADIENT
DATE 23 MAR			SREF # 6 LREF # BREF # SCALE #		• Z0		• 20		20		• 20		. 20

		OCT 75)		5.000 5.000 6.000	000.		CBL 00105 00092		CBL 00114 00091	. 0001	1 75)		5.000 5.000 .000	noc .	CBL 00040 00047	50000.	CBL 00048 00041	
ā		(17	: DATA	STAB ELEVON # DX		•	00003 . 00093 . 00000		. 00090 . 00090	00000.	2) (17 OCT	DATA	STAB ELEVON BOX		CYN .00073		.00050 .00050 .00071	
	;	(NAHW# I	PARAMETRIC	0000		č	CY .00263 .00305 .00021		CY .00254 .00300	5 3000 .	CVNHM4	PARAMETRIC	0000		. 00326 . 00315		CY . 00189 . 00266	
		_		BETA RUDDER SIORB		ā	.00782 .01574 .00396		CLM .00757 .01537				BETA = RUDDER = 10RB = DY		CLM . 01568 . 02255	1	CLM .01347 .01997 .00325	
	(OKBITER DATA)	אוובע מאווא				3. 00 5. 01	. 07345 . 08373 . 00514	5.00/ 5.00	CD . 07378 . 08445 . 00534		(ORBITER DATA)			5.00/ 5.00	CD . 06851 . 07713	.00/ 5.00	CD . 06979 . 07887 . 00454	
	AT! 025! (C					,	. 35279 . 35579 . 03540	INTERVAL * -	CL .28209 .35752		AT1 0251 (OF			,	CL .24783 .30620 .02919	INTERVAL = -5	CL .25897 .31786 .02944	
CA23B	747/1	•			GRADIENT INTERVAL	۵	09718 14783 02532	GRADIENT INT	DY 08635 14691 03023		1/242		-	GRADIENT INTERVA	07 01679 -:02787 00554	GRADIENT INTE	07 04520 02685 .00917	
DATA -	14-120(CA23B)			0000 IN. XO 0000 IN. YO 0000 IN. ZO	- 1.97		07934 09778 00922	1.97	08686 12072 1693		14-120(CA23B)	;	0000 IN. YO 0000 IN. YO 0000 IN. ZO	1.98	0x 01826 00129	1.98 G	DX 06493 07572 00539	
TABULATED SOURCE	ARC			= 1109. = 375.	RN/L	1088	4.01317 3.947 ⁻ 7 03270	RN/L	10RB 3.99721 3.94057 02832		ARC	-	375.	RN/L *	10RB 3.96266 3.93590 01388	RN/L .	10RB 3.99447 3.98402 00522	
TABL		NCE DATA	ť	SU.FI. XMRP IN. YMRP IN. ZMRP		MACH	. 50000		MACH .50000 .50000		CE DATA		YMRP		30000 30000 00000		МАСН . 30000 . 30000	
MAK /6		REFERENCE	6	2000,022 2000,022 1 0018,474 1 0018,026 1 0018		45.000 ALPHAC	GRADIENT		SD.000 ALPHAC P.000 P.000 GRADIENT		REFERENCE DAT	2690,0000 so	936.6800 IN.		3.500 ALPHAC 2.000 4.000 GRAD:ENT		7.500 ALPHAC P.500 H.000 GRADIENT	
HAM CO NICO			SPIT	LREF = BREF = SCALE =		. 20		2	. 70				LREF BREF SCALE	ļ	* 70	ä		

6 1 1	75)		5.000		CBL 00084 00047 .00019		CBL 00051 00083 00016		CBL 00097 00083		CBL -,00073 -,00051		CBL 00050 00042
PAGE	1 (17 007	DATA	STAB = ELEVON = DX MACH =		CYN .00035 .00043		CYN .00059 .00056		CYN . 000053 . 000044		CYN .00053 .00041		CYN . 00057 . 00045 00006
	(VNHM42)	PARAMETRIC	00000		CY 00003 00144 00040		CY . 00246 . 00252		CY .00250 .00195 00027		CY .00198 .00119		CY .00209 .00117 00046
		ū.	BETA # RUDDER # 10RB # DY		CLM .01200 .01912 .00356		CLM .01076 .01819		CLM .00924 .01711 .00394		CLM .00835 .01558		CLM .00809 .01499 .00345
	ITER DATA)			.007 5.00	CD . 07000 . 07979 . 00489	.00/ 5.00	CD . 07178 . 08097 . 00460	00/ 2.00	CD . 07425 . 08424 . 00500	007 5.00	CD . 07544 . 08543 . 00500	-5.00/ 5.00	CD . 07587 . 08564 . 00488
	1 0251 (ORBITER			INTERVAL = -5.	CL .25472 .32044 .03286	INTERVAL = -5.	CL . 26416 . 33075 . 03330	INTERVAL = -5.	CL . 27456 . 34867 . 03705	:RVAL = -5.	CL. .28098 .35594 .03748	t)	CL .28410 .35813 .03702
ΩQ	11 747/1 ATI			GRADIENT INTE	0Y 01635 04987 01676	GRADIENT INTE	DY 02784 03549 00380	GRADIENT INTE	07 03594 04474 04474	GRADIENT INTERVAL	DY -,12238 -,10952 .00643	GRADIENT INTERVAL	DY 16157 13170
DATA - CA23B	14-120 (CA23B)		00000 IN. XO 00000 IN. YO 00000 IN. ZO	1.98 64	DX 00117 08873 04378	1.98 GF	.07845 04327 01759	1.97	. 11489 07696 01896	1.97	0x 09171 05810.	1.97	0X -09355 -0400-
SOURCE	ARC 1		1109.00 10.00 10.00	RN/L =	1088 3.95201 3.99449 .02124	RN/L =	1088 4.00542 3.96126 02208	RN/L	10R8 4.02939 3.97863	RN/L =	10RB 4.02411 3.98272 02069	RN/L =	1CPB 4.02982 3.97770
TABULATED		E DATA	YMRP YMRP ZMRP		. 30000 . 30000 . 30000		.30000 .30000 .00000		. 30000 . 00000		МАСН . 30000 . 30000		MACH .30000 .00000
MAR 76		REFERENCE	2690.0000 SQ. 474.8100 IN. 936.6900 IN.		10:000 ALPHAC A.000 A.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GRADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT		45.000 AEPHAC 2.000 4.000 GRADIENT		* 50.000 ALPHAC 2.000 4.000 GRADIENT
DATE 23 M			SREF LREF BREF SCALE		. 20		. 20		* Z0		, ZQ		Z Q

TABULATED SOURCE DATA - CA238

i€ +20	1 75)		5.000		CBL 000 62 00075 00082		CBL 00056 00081 00081		CBL0008500103		CBL 00089 00111		CBL 00095 00119 00119
PAGE	3) (17 00		- 471.1 ()		CÝN .00123 .00105 .00074 .		.00115 .00108 .00074		CYN .00100 .00068 .00068		CYN .00102 .00091 .00066		CYN . 00100 . 00086 . 000049
	(ZNH008)	PARAMETRIC	000.9		CY .00356 .00395 .00381		CY .00303 .00328 .00345		CY .00239 .00134 .00290		CY .00269 .00268 .00327		CY .00226 .00305 .00305
			BETA = RUDDER = 10RB = 0Y	0/ 5.00	20000	0/ 5.00	$\Sigma \rightarrow U \cup O$	0/ 5.20	CLM .01176 .02080 .02724 .00000	5.00	.01011 .01906 .02584 .00000	/ 5.00	90000
	(ORBITER DATA)			/AL = -5.00,	CD .06975 .07509 .09319	-5.0	CD . 07097 . 07989 . 09493	-5.0	.07151 .08041 .08571	AL = -5.00.	CD . 07238 . 09146 . 09742	AL = -5.00/	CD . 07406 . 08412 . 10132
	AT1 0251 (OR			GRADIENT INTERVAL	CL .28470 .34150 .40441 .00000	GRADIENT INTERVAL	CL .28831 .34513 .41323	GRADIENT INTERVAL	CL .28895 .34925 .41402	GRADIENT INTERVAL	CL .28632 .34861 .42038 .00300	GRADIENT INTERVAL	CL 28526 .35905 .43664 .00000
CA238	1/247			3.34 GRA	. 18918 - 10106 - 18983 - 00000	3.35 GRA	DY 36797 31915 46731 .00000	3.35 GRA[7 -,47390 -,41868	3.35 GRAD	07 47798 34585 40137	3.35 GRAD	DY -,40582 -,33416 -,40864
DATA -	14-120(CA23B)		3000 IN. XO 3000 IN. YO 3000 IN. ZO	RN/L =	0x .67175 05416 07544 .00000	FIN/L =	00000. - 02110. - 05850.	RN/L *	03752 15116 03752 02591	RN/L =	00000.	RN/L =	09209 . 09209 . 00780 - 10720
TABULATED SOURCE	ARC		1109.00 100.00 11 375.00	0 /0 .	ALPHAC . 00000 2.00000 4.00000	0 /0	ALPHAC.00200	0 /0	ALPHAC .00000 4.00000	0 /0	ALPHAC . 5C000 . 2 C0000 4 . C00000 .	0 /0	ALPHAC .00000 P.00000 4.00000
TABUL		CE DATA	FT. XMRP YMRP ZMRP	RUN NO	MACH . 59057 . 58914 . 59028	RUN NO	MACH . 58987 . 58902 . 59118	RUN NO.	MACH .59202 .59301 .59058	RUN NO.	MACH .59255 .59219 .59101	RUN NO.	MACH .59159 .59155 .59167
AR 76		REFERENCE DAT	2690,0000 SQ.F' 474.8100 IN. 936.6800 IN.	•	AL PHAO 6.000 8.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRADIENT		AL PHAO 6.000 8.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRADIENT
UAIL ES MAR			SREF LREF BREF SCALE		3.500 3.500 3.500		02 7.500 7.500		02 10.000 10.000 10.000		02 15.000 15.000 15.000		02 30.000 30.000

DESCRIPTION FROM ENTER STATE OF THE STATE OF

					87 09 13		<u> </u>)57)21)57		373 353 364 300
اڭ 121	1 27 TS		5.000 600 600 600		CBL 00087 00109 000113		CBL 00091 00091	000 75		5.000 5.000 6000		CBL 00057 00021 00057		CBL 00073 00053 00064
PAGE	9) (17.00	DATA	STAB ELEVON DX MACH	•	. 00092 . 00075 . 00075		CYN .00086 .00093 .00093	(17	DATA	STAB ELEVON DX MACH		CYN .00105 .00064 00004		CYN .00087 .00067 00008
	(2NH008)	PARAMETR I C	6.000 6.000 6.000		. 00176 . 00176 . 00174 . 00266		CY . 00154 . 00182 . 00258	(600HNZ)	PARAMETRIC	000 000 000 8		CY . 00468 . 00458 . 00000.		CY . 00396 . 00452 . 00548
			8ETA RUDDER 10RB DY	00/ 5.00	CLM .00632 .01523 .02121	00/ 5.00	CLM .00616 .01485 .02060			BETA BRUDDER BOY	.00/ 5.00	.02127 .02781 .03390	00/ 5.00	CLM .01856 .02612 .03199
	(ORBITER DATA)			.5.	. 07525 . 08573 . 10447	.55.	CD . 07547 . 08629 . 10491	(ORBITER DATA)			• ·	CD .08390 .09995 .12278	AL = -5.	CD .08553 .10016 .12455
	0251			GRADIENT INTERVAL	CL .28293 .36228 .45028	GRADIENT INTERVAL	CL . 28567 . 36357 . 45185	A11 0251 (OR			GRADIENT INTERVAL	CL .39564 .46578 .52598	GRADIENT INTERV	CL .39563 .46036 .53183
88	3) 747/1 ATI			3.34 GRAI	07 - 47401 - 48236 - 52115	3.33 GRAI	DY -,53060 -,45502 -,48963	11/24/			3.34 GRA	DY -,28840 -,5882 -,58163	3.35 GRA	DY -,46973 -,49652 -,53884 -,00000
DATA - CA23B	14-120(CA238		000 000 IN. XO 000 IN. ZO	RN/L	0x -,07540 -,03616 -,16935	FN/L =	00000.	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L .	20000 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	PN/L *	0x -2.01;03 -3739; -,02504
TABULATED SOURCE	ARC		1109.0000 1.0000 1.0000	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 P.00000 4.00000	ARC		1109.0	0 %	ALPHAC .00000 4.00000	0 /0	ALPHAC .00300 2.05333 4.00000
TABULAT		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .59230 .59245 .00000	RUN NO.	MACH . 59329 . 59239 . 59204		E DATA	LFT. XMRP I. YMRP I. ZMRP	RUN NO.	.58956 .58901 .59001 .59111	RUN NO.	мАСН .5899; .59113 .59117
75 7		REFERENCE	2590.0000 SO.1 474.8130 IN. 936.6800 IN.		ALPHAO 6.000 8.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRADIENT		REFERENCE DAT	2690.0000 SO. 474.8100 IN. 936.5800 IN.		ALPHAO 8.000 10.000 12.000 GRADIENT		AL PHAO 8.000 10.000 12.000 GRADIENT
DATE 23 MAR			SREF = 26 LREF = 1 BREF = 5 SCALE = 1		02 45.000 45.000 45.000		50.000 50.000 50.000			SREF * 2 LREF * BREF * SCALE *		3.500 3.500 3.500		02 7.500 7.500 7.500

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA)

(ZNH009) (17 0CT 75)

	-1.000 5.000 .000		CBL 00100 00074 00066		CBL 00102 00101 00078		CBL 00124 00111 00063		CBL 00115 00097 00079		CBL 00119 00011 00073
DATA	STAB = ELEVON = DX = MACH =		CYN .00090 .00078 00009		CYN .00068 .00040 00023		CYN .00068 .00033 00035		CYN .00073 .00026 00031		
PARAMETR 1C	.000 .000 .000 .000		CY .00344 .00489 .00579		CY .00243 .00316 .00546		CY .00249 .00378 .00577 .00000		. 00262 . 00333 . 00502 . 00502		CY .00281 .00334 .00457
	BETA # RUDDER # 10RB # DY	0/ 5.00	CLM .01898 .02491 .03068	0/ 5.00	CLM .01744 .02354 .02880	0/ 5.00	CLM .01550 .02129 .02602	00/ 5.00	CLM .01353 .01951 .02353	0/ 5.00	CLM .01369 .01912 .02278
		VAL = -5.00/	. 10023	/AL = -5.00/	CD . 08468 . 10084 . 12745	/AL = -5.00,	.08659 .10428 .13387 .00000	- 5.	.08760 .10566 .13736	/AL = -5.00/	. 08811 . 10625 . 13800
		GRADIENT INTERVAL	CL .38692 .45528 .53670 .00000	GRADIENT INTERVAL	CL .38362 .45715 .53951 .00000	GRADIENT INTERVAL	CL .38623 .46621 .56267 .00000	GRADIENT INTERVAL	CL .38116 .46793 .57321 .00000	GRADIENT INTERVAL	.38467 .47247 .57618
		3.35 GRA	07 -,43816 -,53020	3.35 GRAD	07 -,39780 -,46944 -,53470	3.35 GRAD	DY -,52196 -,42881 -,53052	3.34 GRAD	DY -,55849 -,45507 -,45507	3.33 GRAD	DY -,52363 -,48819 -,46192
	0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L .	0x -,07935 -,05658 -,05430	FN/L =	0x 18171 01052 09143	RN/L	13688 10129 13779	RN/L *	0x -,04829 -,150417 -,15068	FN/L .	00194 . 001316 09422
	1109.0 .0 .0 .375.0	0 /0	ALPHAC .00000 2.00000 4.00000	0 %	ALPHAC .00500 2.00000 4.00000	0 6	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC . 000000 . 4.0000000000000000000000000	0 /0	ALPHAC . 95950 R. 05000 4. 05000
E DATA	FT. XMRP YMRP ZMRP	RUN NO.	МАСН . 59127 . 59204 . 59373 . 00000	RUN NO.	MACH .59244 .59188 .59315	RUN NO.	MACH .59222 .59285 .59137	RUN NO.	MACH .59197 .59243 .59.78	RUN NO.	MACH .59188 .59167 .59268 .00000
REFERENCE DAT	2690.0000 SQ. 474.8100 IN. 935.6900 IN.		ALPHAO B.000 10.000 12.000 GRADIENT		ALPHAO 8.000 10.000 12.000 GRADIENT		ALPHAO 8.000 10.000 12.000 GRADIENT		ALPHAO 8.000 10.000 12.000 GRADIENT		ALPHAO 8.003 10.003 12.000 GRADIENT
	SREF LREF = BREF SCALE = SCALE		02 10.000 10.000		02 15.000 15.000		30.000 30.000 30.000		02 45.000 45.000 45.000		50.000 50.000 50.000

423	15)		5.000 .000 .600		CBL 00125 00032 00095		CBL 00112 00104 00074		CBL 00100 00074 00050		CBL 00116 00105 00087		CBL 00126 00105 00074
PAGE	1 1 1 0CT	DATA	STAB ELEVON BOX MACH		CYN .00101 .00035 00020		. 00009 . 000043 . 00007		CYN .00087 .00054 00033		CYN .00073 .00034 00038		.00065 .00065 .0000.5
	(2NH010)	PARAMETRIC (0000.8		. 00000 . 00502 . 00502		CY .00349 .00530 .00515		CY .00291 .00396 .00532		. 00241 . 00322 . 00490 . 00090		CY .00178 .00310 .00399
		α.	BETA RANDDER IORB	/ 5.00	CLM .02338 .02802 .03345	/ 5.00	. 02119 . 02634 . 03153 . 03100	1/ 5.00	.01947 .02514 .03018	00.5 /0	CLM .01834 .02370 .02848	0/ 5.90	CL** .01613 .02148 .02569
	TER DATA)	•		AL = -5.00	CD . 08350 . 10105 . 12530	AL = -5.00	CD .08465 .10196 .12793	AL # -5.00	. 08523 . 10259 . 12984 . 12984	'AL +5.00₁	CD .08581 .16340 .13157	/AL = -5.00	CD .08756 .10653 .13672
	0251 (ORBITER			IENT INTERVAL	CL .46170 .45638 .53935	GRADIENT INTERVAL	CL .39869 .46891 .54590	GRADIENT INTERVAL	CL .39577 .47103 .55078	GRADIENT INTERVAL	CL .39708 .47153 .55541	GRADIENT INTERVA	CL .39814 .48257 .57413
œ	1 747/1 ATI			.33 GRADIENT	.39993 .39993 .71214 .67475	3.32 GRAD	08072 08072 11391 .13091	3.32 GRAD	0,40700 -,40700 -,29551 -,29551	3.32 GPA	7.36917 36917 37159 40978	3.33 GRA	DY 51761 47056 46531
DATA - CA238	14-120(CA23B)		00000 IN. X0 00000 IN. Y0 00000 IN. Z0	RN/L = 3	0x -,14459 -,03459 -,02236	PN/L =	0x 13:05 03201 05084	RN/L =	74 14457 02652 07409	RN/L =	0X - 13299 - 02759 - 07079	PN/L =	0.0000 - 10.394 - 10.395 - 11.834 - 00.000
ED SOURCE	ARC		. 1109.00	0 /0	ALPHAC. 00000 4.00000 .	0 /0	ALPHAC .00000 P.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 / 0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 .00000 .4.00000
TABULATED SOUR		DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH . 59528 . 59463 . 59120 . 00000	RUN NO.	MACH . 59524 . 59624 . 59500 . 00000	RUN NO.	MACH . 59458 . 59782 . 59822	PUN NO.	масн . 59542 . 59651 . 59752 . 00000	PLSN NO.	МАСН . 59671 . 59659 . 59605
R 76		REFERENCE DATA	2690.0000 SQ.F 474.8100 IN. 936.6800 IN.		ALPHAO 8.000 10.000 12.000 GRADIENT		AL PHAO B.000 10.000 12.000 GRAD 1ENT		AL PHAO B.000 10.000 12.000 GRADIENT		AL PHAO 8.000 10.030 12.000 GRADIENT		AL PHAO 8.000 10.000 12.000 GRADIENT
DATE 23 MAR			SREF LREF BREF SCALE		02 3.500 3.500		02 7.500 7.500		DZ 10.000 10.000 10.000		15.000 15.000 15.000		02 30.000 30.000 30.000

TABULATED SOURCE DATA - CA23B	
IE 23 MAR 76	

N. XO	_	TABULATED SOURCE D	ATA - CA23B -120(CA23B)	747/1 AT1	I O251 (ORBITER	ITER DATA)		12NH010	í í	1 2년 1
## 3.33 GRADIENT INTERVAL = .5.00 / 5.00 ## 5.00 ## 5.00 ## 5.00 ## 6.0	REFERENCE DATA 0000 SO.FT. XMRP = 1109.00 8100 IN. YMRP = 375.00 6800 IN. ZMRP = 375.00	00000				•	# : # #		DATA STAB ELEVON DX MACH	
19518 -14388	RUN NO. 0/ 0	RN	ii W			i,	ν. σ			
74. E 3.32 GRADIENT INTERVAL = -5.007 5.00 25.00 26.0946148167	MACH ALPHAC . 59578 . 050000 . 59641 2.00000 . 59539 4.00000 . 00000	X		0Y -,43686 -,42721 -,47170	CL .31755 .43091 .58585 .00000	.08839 .19540 .13991 .00000	.01507 .02014 .02371	CY .00167 .00350 .00382	. 00064 . 00019 00037	_ ; ; ;
DY	RUN NO. 0/ 0	Š	W.			i,	Ŗ,			
No. XO	MACH ALPHAC 59362 .00000 59473 2.50000 59456 4.00000	X00	398 346 397 300	DY -,44117 -,48167 -,53064 .00000	CL . 39498 . 4870 3 . 58921 . 00000	.08871 .10815 .14076 .00000	CLM .01439 .01928 .02312 .00000	CY .00159 .00351 .00395	O	
IN. XO IN. YO IN	ARC 1	4-12	01CA23B)	ΑŢ	0251			(ZNHO)	(17	
N. XO	DATA						_	ARAME TR		
3.34 GRADIENT INTERVAL = -5.00/ 5.00 DY	1. XMRP = 1109.01 YMRP = .00 ZMRP = 375.01	00000					nr.			K
DY CL CD CLM CY CYN17585 .18458 .06138 .01110 .00271 .0010418204 .24155 .05643 .01691 .00307 .0011119776 .29814 .07438 .02408 .00274 .00096 .00000 .00000 .00000 .00000 .00000 3.35 GRADIENT INTERVAL = -5.00/ 5.00 DY CL CLM CY11285 .19032 .06179 .00928 .00282 .0011722689 .24803 .06739 .01423 .00286 .0010822655 .30591 .07568 .00103 .00000 .00000	RUN NO. 0/ 0	NN.	# W			i,	5.			
3.35 GRADIENT INTERVAL = -5.007 5.00 DY	.59330 .00000 .59330 .00000 .59263 2.00000 .59218 4.00000	Z O O O O		.17585 18204 19776 .00000	CL 18458 . 24155 . 29814 . 00000	.06138 .05543 .07438	. 01110 . 01691 . 02408 . 00000	CY .00271 .00307 .00000	. 00104 . 00111 . 00096 . 00000	
DY CL CD CLM CY CYN 34711285 .19032 .06179 .03828 .00282 .00117 72422689 .24803 .06739 .01423 .00286 .00108 58722635 .30591 .07558 .02153 .00351 .00111 500 .00000 .00000 .00000 .00000 .00000	RUN NO. 07 0	N N	ms o			i.	5.			
	MACH ALPHAC .59408 .00500 .59178 2.00500 .59253 4.00000	Z	947 724 587 500	0Y 11285 22680 22635	CL . 19032 . 24803 . 30591 . 00000	.06!79 .06739 .06739 .07558	ᅜᆘᇄᄼᆘᇎᄗ	CY .00282 .00286 .00351		80000

DE POOR QUALITY

425	15)		5.000 5.000 6.000 600		CBL 00063 00093 00090		CBL000910008200093		CBL 00107 00098 00113		CBL 00101 00092 00105		CBL00096000099
PAGE	(17 007	DATA	STAB E ELEVON E DX B MACH E		CYN . 00124 . 00114 . 00103		. 00134 . 00130 . 00111		. 00102 . 00102 . 00100 . 00000		. 00108 . 00101 . 00095		. 00106 . 00106 . 00006 . 000096
	(ZNH011)	PARAMETRIC [0000		CY .00341 .00305 .00310		. 00367 . 00340 . 00321 . 00000		CY .00280 .00213 .00213		CY .00218 .00207 .00259		.00203 .00221 .00257 .00257
		α.	BETA * RUDDER * 10RB * DY	5.00	CLM .00680 .01297 .02055	/ 5.00	. 00492 . 01140 . 01977 . 00000	1 5.00	CLM .00226 .00921 .01803	00.5 /0	CLM .00068 .00805 .01670	0/ 5.00	CLM .00016 .00772 .01632
	TER DATA)			ال = -5.00/	CD .06223 .06803 .07631	AL = -5.00	.06344 .06910 .07779	AL = -5.00	.06502 .07195 .08167	'AL = -5.00	. 06644 . 07354 . 08441 . 00000	-5.0	CD .06700 .07396 .08522
	0251 (ORBITER			ENT INTERVAL	. 19093 . 25074 . 30882	ENT INTERVAL	. 19260 . 25400 . 31615	IENT INTERVAL	.19275 .26263 .33510	GRADIENT INTERVAL	CL . 19290 . 27317 . 35252	GRADIENT INTERVAL	CL .19293 .27704 .35823
m	747/1 AT1			.35 GRADIENT	07 15718 25642 24334 .00000	.35 GRADIENT	57 15353 20103 00000	3.35 CRADIENT	DY 16001 23890 00000	3.34 GRAD	70 23397 28903 22929	3.33 GRAD	07 - 25594 - 29421 - 20810
DATA - CA238	4-120(CA23B		000 IN. X0 0000 IN. Y0 0000 IN. Z0	RN/L = 3	0x 14626 .07409 .01922	FN/L = 3	DX 12417 01486 13120	RN/L = 3	0x 13025 13397 12946 .00000	RN/L .	0X 07470 82515 87841	RN/L =	DX - 05/33 - 24/87 - 17550
SOURCE	ARC 1		1109.00 .00 .375. #	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 4.00000	0 /0	AL PHAC . 50000 2.00000 4.00000
TABULATED		DATA	T. XMRP YMRP ZMRP	PON NO.	MACH .59257 .59162 .59123 .00000	RUN NO.	MACH .59363 .59363 .59510	RUN NO.	7.4CH . 59535 . 59536 . 59389	BUN NO.	74СН . 59326 . 59326 . 59271	PUN NO	MACH . 59237 . 59276 . 59289
R 76		REFERENCE	2690.0000 SQ.F 474.8100 IN. 936.6800 IN.		ALPHAO 4.000 6.000 8.000 GRAD!ENT		ALPHAO 4.000 6.000 8.000 GRADIENT		ALPHAO 4.003 6.000 8.000 6RADIENT		AL PHAC 4.000 6.000 8.000 GRADIENT		ALPHAD 4.000 6.000 8.000 GRADIENT
DATE 23 MAR	;		SREF * SCALE *	,	02 10.000 10.000 10.000		02 15.000 15.000		02 30,000 30,000 30,000		02 45.000 45.000 45.000		50.000 50.000 50.000 50.000

ARC 14-120(CA238) 747/1 ATI 025! (ORBITER DATA)

(ZNH013) (17 OCT 75)

ر د	2.000.00.000.000.0000.0000.00000000000		CBL 00044 00046 00006		CBL 00046 00059 00057		CBL 00061 00072 00072		CBL 00067 00071 00085		CBL 00101 00096 00097
5) (1 / CC)	STAB # ELEVON # DX MACH #	•	CYN . 00101 . 00106 . 00081		CYN . 00111 . 00104 . 00078		CYN .00122 .00094 .00073		CYN .00106 .00092 .00064		CYN .00101 .00085 .00065
T CIGHT SHAGAG	0000.9		CY .00186 .00293 .00268		CY .00206 .00237 .00234		CY .00243 .00184 .00246		CY .00199 .00184 .00224		.00211 .00182 .00299
	BETA BRUDDER FIORB FIORB	.00/ 5.00	CLM .01711 .02524 .03232	.00/ 5.00	CLM .01390 .02550 .02940	00/ 5.00	CLM .01306 .02188 .02863	00/ 2.00	CLM .01167 .02019 .02694 .00000	5.00	CLM .00957 .01849 .02476
		u rb	CD .07128 .08082 .09443 .00000	ت. ئ	CD . 07151 . 08048 . 09567 . 00000	* .5.	CD .07176 .08063 .09609	# Å	CD .07232 .08195 .09760	/AL = -5.00,	CD .07378 .08407 .10127
		GRADIENT INTERVAL	CL .29838 .35121 .41304 .00000	GRADIENT INTERVAL	CL . 29525 . 35221 . 41977 . 00000	GRADIENT INTERVAL	CL .29537 .35337 .42175	GRADIENT INTERVAL	CL .29399 .35515 .42557 .00000	GRADIENT INTERVAL	CL .29519 .36502 .44301 .00000
•		3.33 GRA	DY 52888 45886 53850	3.32 GRA	0Y -,42355 -,49988 -,51321	3.32 GRA	0.00000.	3. 32 GRAI	07 47005 49785 52853	3.33 GRA[DY 45772 53834 50667 .00000
	0000 IN. YO 0000 IN. YO 0000 IN. ZO	RN/L =	DX -,02265 -,03416 -,06456	FN/L =	0X -,14594 -,03204 -,03940	RN/L =	DX -,18620 -,00336 -,07451	RN/L =	DX . 09841 - 01302	RN/L =	00000. - , 13369 - , 08949 - , 08000
	1109.	0 /0 .	ALPHAC .00000 .2.00000 4.000000	0 /0 .	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 / 0	ALPHAC .00000 2.00000 4.00000
CE DATA	YMRP YMRP ZMRP	RUN NO	MACH .59330 .59492 .59380	NON NO	MACH .59143 .59273 .59233	PUN NO	MACH . 59144 . 59173 . 59263	NON NO	MACH . 59111 . 59100 . 59097	RCN NO.	MACH . 59008 . 59033 . 59054 . 00000
REFERENCE DATA	2690.0000 50. 474.8100 IN. 936.6800 IN.		ALPHAO 6.000 8.000 10.000 GRADIENT								
	SREF LREF BREF SCALE #		3.500 3.500 3.500		02 7.500 7.500 7.500		02 10.000 10.000		02 15.000 15.000		30.000 30.000 30.000 30.000

427	15)		5.000 5.000 .000		CBL 00068 00087 00079		CBL 00064 00056 00056	. 75		5.000 .000 .000 .000 .000		CBL 00107 00122 00104		CBL001200012100119
PAGE	17 OCT	DATA	STAB ELEVON BOX		.00098 .00086 .00086		CYN .00098 .00090 .00054) (17 OCT	DATA	STAB ELEVON FOX MACH		CYN .00074 .00079 .00000		CYN .00076 .00084 .00084
	(ZNH013	PARAMETRIC	. 000 . 000 6. 000		. 00127 . 00143 . 00209		.00131 .00135 .00215	(2NH020)	PARAMETRIC	00000		. 00274 . 00314 . 00355		CY .00262 .00328 .00390
		u	BETA = RUDDER = 10RB = DY	00.5 //	CLM .00866 .01724 .02296	0/ 5.00	CLM .00789 .01642 .02222 .00000			BETA KANDOER HOOFE HOOFF	0/ 5.00	CLM .04559 .05006 .05735	0/ 5.00	CLM .04303 .04732 .05533
	(ORBITER DATA)			AL = -5.00,	. 07465 . 08519 . 10364 . 00000	AL = -5.00/	. 07532 . 08628 . 10490	(ORBITER DATA)			AL = -5.00.	CD . 05485 . 05660 . 06184	/AL = -5.00,	CD .05545 .05733 .06251
	0251			GRADIENT INTERVA	.29372 .36866 .45269	GRADIENT INTERVAL	. 29206 . 36978 . 45785	1 0251			GRADIENT INTERVAL	.11198 .16309 .22196	GRADIENT INTERVAL	CL .12113 .16475 .22543
œ	3) 747/1 AT1			3.33 GRAD	.53810 53810 53385 55385	3.32 GRAD	07 -,48797 -,52602 -,56621	B) 747/1 AT			3.32 GRAD	DY 26345 45158 29279	3.32 GRAE	07 -,44775 -,37930 -,36577
DATA - CA238	14-120(CA23B)		0000 IN. X0 0000 IN. Y0 0000 IN. Z0	RN/L =	0 0 1 9 6 0 0 1 9 6 0 0 8 0 4 6 0 8 0 4 6 0 8 0 0 0 0 0 .	EN/L =	0x .02183 18551 18359	14-120(CA238		0000 0000 1N. YO 0000 1N. ZO	RN/L =	0X 05223 02453 08535	RN/L =	0x 10972 06:73 06516
TABULATED SOURCE	ARC		1109.0	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	ARC		1109.0 10.0 1375.0	0 /0	ALPHAC ,00000 P.00000 4.000000	0 /0	ALPHAC .00000 2.00000 4.00000
TABULA		DATA	FT. XMRP YMRP ZMRP	RUN NO.	59017 . 59079 . 59103	NO. NO.	MACH .59036 .59152 .59141 .06u00		E DATA	XMRP YMRP ZMRP	RUN NO.	MACH . 53802 . 58859 . 58835	RUN NO.	7864 7887 7887 7887 00000
1R 76		REFERENCE	2690.0300 53.P 474.8100 IN. 936.6800 IN.		ALPHAO 6.000 8.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRADIENT		REFERENCE	2690.0000 53.F 474.8100 1N. 936.6800 1N.		AL PHAO 4.000 6.000 8.000 GRADIENT		ALPHAO 4.000 6.000 8.000 GRADIENT
DATE 23 MAR			SREF = CLREF = CSCALE		02 45.000 45.000		50.000 50.000 50.000			SREF = ; LREF = BREF = SCALE =		02 3.500 3.500		02 7.500 7.500

PAGE 428	(ZNHD20) (17 OCT 75)
	ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA)
TABULATED SOURCE DATA - CA23B	ARC 14-120(CA23B)

!	5.000 .000 .000 .600		CBL 0014¢ 00146 00117		CBL 00155 00180 00121		CBL 00163 00147 00150		CBL 00147 00155 00147		CBL 00139 00154 00144
DATA	STAB ELEVON # OX MACH		. 00091 . 00090 . 00095		CYN .00078 .00083 .00076		CYN .00073 .00064 .00062		. 00070 . 00066 . 00065		.00067 .00068 .00068
PARAMETRIC	0000.		CY .00358 .00402 .00402		CY .00302 .00319 .00323		CY .00264 .00221 .00278		.00219 .00228 .00264		.00190 .00229 .00253
	BETA RUDDER 10RB DY	00/ 5.00	CLM .04178 .054570 .05431	00/ 5.00	CLM .03989 .04495 .05349	0/ 5.00	CLM .03698 .04283 .05200	00/ 5.00	CLM .03550 .04137 .05095	0/ 5.00	CLM .03505 .04080 .05064
		* .5.	CD . 05595 . 05793 . 06313	*	CD .05637 .05896 .06470	VAL = -5.00.	. 05796 . 06126 . 05779 . 00000	*	.05852 .06236 .06957 .00000	VAL = -5.00,	CD .05859 .06265 .07025
		GRADIENT INTERVAL	. 17199 . 17199 . 22755	GRADIENT INTERVAL	CL .12325 .17523 .23587 .00000	GRADIENT INTERVAL	CL .12132 .18397 .25225 .00000	GRADIENI INTERVAL	Cl. 11959 18953 26533	GRADIENT INTERVAL	CL .11932 .19085 .26983
		3.32 GRAE	07 36690 29638 38358	3.30 GRA[07 37890 40109 39269	3.30 GRA	07 37297 40675 37248	3.30 GRAE	07 36765 36932 44889	3.29 GRAE	07 -,37556 -,37271 -,48330
	0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	DX 10786 06237 07726	F.N.L =	0x 06338 05904 05900	RN/L =	. 10103 - 11109 - 11348	RN/L =	. 03140 . 03140 . 14937 . 11437	RN/L =	009589 16317 10503
	# 1109.0 # 375.0	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 8.00000 4.00000	0 / 0	AL. PHAC . 00000 2.00000 4.00000	0 /0	ALPHAC
E DATA	FT. XMRP YMRP . ZMRP	RUN NO.	MACH .58804 .58923 .59037	RUN NO.	MACH .58762 .58706 .58649	RUN NO.	MACH .58719 .58734 .58789	PUN NO.	MACH .56474 .58677 .59682	RUN NO.	MACH .58364 .58607 .58546
REFERENCE DATA	2690.0000 SQ. 474.8100 IN. 936.6800 IN.		AL PHAO 4.000 6.000 8.000 GRADIENT		AL PHAO 4.000 6.000 8.000 GRADIENT		AL PHAD 4.000 6.000 8.000 GRADJENT		AL PHAO 4, 000 6, 000 8, 000 GRADIENT		AL PHAO 4.000 6.000 8.000 GRADIENT
	SREF # 6 LREF # 8 BREF # SCALE #		02 10.000 10.000 10.000		02 15.000 15.000		DZ 30.000 30.000 30.000		000.2 45.000 45.000 45.000		50.000 50.000 50.000 50.000

ORIGINAL PAGE IS OF POOR QUALITY

624	1 57		-1.000 .000 .000 .600		CBL 00108 00112 00107		CBL 00131 00115 00118		CBL 00134 00122 00122		CBL 00167 00138 00122		CEL 00144 00160 00138
PAGE	(17 007	DATA	STAB E ELEVON E DX MACH E	ť	CYN .00082 .00085 .00075		CYN .00093 .00085 .00072		. 000082 . 000093 . 000067		CYN .00076 .00072 .00070		. 000071 . 00008 . 000064 . 000000
	(ZNH021)	PARAMETRIC E	00000		CY .00323 .00372 .00352		CY .00376 .00340 .00331		. 00327 . 00355 . 00307		CY .00320 .00280 .00320		CY .00239 .00252 .00283 .00000
		•	BETA = RUDDER = 10RB = DY	0/ 5.00	.04687 .05152 .05916	00/ 5.00	CLM . 04400 . 04896 . 05694	00/ 2.00	CLM .04231 .04784 .05608	00/ 5.00	CLM . 00003 . 04643 . 05494	0/ 5.00	CLM .03787 .04401 .05315
	(ORBITER DATA)			-5.0	. 05294 . 0521 . 0551 . 06061	" 'Ç	.05336 .05336 .05582 .06138	ı,	. 05528 . 05628 . 05628	- -5.	CD .05453 .05748 .06357	VAL = -5.00/	CD . 05632 . 05996 . 06703
	0251			GRADIENT INTERVAL	. 10797 . 16375 . 22896 . 00000	GRADIENT INTERVAL	CL .10548 .16613 .22646	GRADIENT INTERVAL	. 10590 . 16900 . 22971 . 00000	GRADIENT INTERVAL	CL .11262 .17405 .23664	GRADIENT INTERVAL	CL .11378 .18482 .25452
œ) 747/1 AT1			3.34 GRAD	07 20532 17981 15665	3.33 GRAD	. 18138 10900 14147 00000	3.33 GRAE	7. 13444 13444 2065 20000	3.32 GRA	07 19366 22289 13890	3.34 GRA	07 24167 24788 00000
DATA - CA238	14-120(CA23B)		000 IN. X0 000 IN. Y0 000 IN. Z0	RN/L = 3	02471 	FIN/L = 3	0x -,16238 -,13195 -,02309	RN/L .	DX 11657 .06359 02995	RN/L =	74742 15742 6634 05:18	RN/L =	08 336 09 323 09 323 00 00 123
TED SOURCE	ARC		= 1109.000 = 305.000	0 /0	ALPHAC . 000000 4 . 000000	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 4.00000	0 %	ALPHAC .00000 4.00000	0 /0 .	ALPHAC .00000 .00000 .00000
TABULATED		E DATA	FT. XMRP YMRP ZMRP	RGN NO.	#ACH . 59024 . 58971 . 58927	RUN NO.	MACH . 58967 . 59009 . 06000	RCN NO.	MACH . 59002 . 58974 . 59026	NON NO	MACH . 59003 . 59012 . 59019	PCN NO	MACH . 58959 . 58978 . 58933
3 76		REFERENCE DATA	2690.0000 50.1 474.8:30 1N. 936.6800 1N.		AL PHAO 4.000 6.000 8.000 6RACIENT		AL PHAO 4.000 6.000 8.000 GRADIENT		ALPHAO 4.000 6.000 8.000 GRADIENT		AL PHAO 4.000 6.000 8.000 GRADIENT		ALPHAO 4.000 6.000 8.000 GRADIENT
DATE 23 MAR			SREF * ZE LREF * L BREF * SCALE *		005 3.500 3.500		02 7.500 7.500 7.500		02 10.000 10.000 10.000		02 15.000 15.000		02 30.000 30.000

- CA238
TABULATED SOURCE DATA -
0412 23 MAR 76

E 430	1 75)				CBL 00131 00157 00123		CBL001310015500115	175)		5.000 .000 .000 .600		CBL 06124 00106 00058		CBL 00133 00031 00089
PAGE	0 6 17 00	PARAMETRIC DATA			CYN .00051 .00058 .00062		CYN .00058 .00062 .00062	(17 OCT	DATA	STAB # ELEVON # DX # MACH #		CYN .00056 .00056 .0000		CYN .00060 .00048 00020
	(ZNH021)				.00142 .00142 .00181 .00189	.00110 .00148 .00155	(ZNH022)	PARAME TR 1C	000. 000. 8		CY .00245 .00340 .00340		. 00384 . 00340 . 00411	
RCE DATA - CA238			BETA RUDDER IORB	00/ 5.00	CLM .03640 .04288 .05218	00/ 5.00	CLM .03504 .04259 .05191			BETA BRUDDER BTORES BY BE BETA BRUDDER	0/ 5.00	CLM .05048 .05746 .07406	00/ 5.00	CLM .05834 .05582 .07196
	(ORBITER DATA)			.5.	CD .05757 .05156 .06917	.5.	CD . 05797 . 05219 . 05981	(ORBITER DATA)			-5.0	. 08089 . 10211	* -5.	00000.
	AT1 0251 (OR			GRADIENT INTERVAL	CL :1495 :19654 :26895 :00000	GRADIENT INTERVAL	CL .11588 .20065 .27355	AT1 0251 10R			GRADIENT INTERVAL	CL .31589 .38219 .45310	GRADIENT INTERVAL	CL .31793 .38278 .45956
	1/247			3.32 GR	28104 27460 17509	3.32 GRA	DY 32597 11324 100000	1/247 (3.31 GRA[01217 22915 25636 00000	3.31 GRA	DY 11484 19164 21784 .00000
	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZC	RN/L =	0x -,02796 -,10951 -,16285	FN/L =	03023 18927 21103	14-120(CA23B		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	0X 16255 01165 15636 00000	RN/L =	DX 18018 06165 12718
	ARC		0.09.0 .0 .375.0	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	ARC		1109.01 .0. = 375.0	0 /0	ALPHAC . 00000 . 2.00000 00000 00000	0 /0	ALPHAC .00000 2.00000 4.00000
		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .58957 .58936 .58944 .00000	PUN NO.	#ACH .588947 .58885 .05000		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH . 53837 . 56507 . 58491	RUN NO.	MACH . 58758 . 5653 . 58530 . 00000
		REFERENCE DATA	2590.0300 SQ. 474.8130 IN. 936.6800 IN.		ALPHAO 4,000 6.000 8.000 GRADIENT		AL PHAO 4.000 6.000 8.000 GRADIENT		REFERENCE	2690.0000 SQ. 474.8100 IV. 936.6800 IV. 936.5800		ALPHAO 8.000 10.000 12.000 GRADIENT		ALPHAO 8.000 10.006 12.003 GRADIENT
0ATE 23 M			SREF ** LREF ** BREF ** SCALE **		02 45.000 45.000 45.000		50.000 50.000 50.000			SREF * CREF * SCALE *		52 3.500 3.500 3.500		02 7.500 7.500 7.500

431	1 57		5.000 .000 .600		CBL 00141 00155 00115		CBL 00146 00137 00116		CBL 00153 00180 00130		CBL 00152 00149 00119		CBL 00144 00145 00124
PAGE	1 17 001	DATA	STAB # ELEVON # OX # MACH #		.00067 .00045 .00030		CYN .00046 .00029 00011		. 000024 000024 000028		.00000 .00019 .00027		CYN .00059 .00021 00018
	(ZNH025)	PARAMETRIC D			CY . 00334 . 00367 . 00054 . 00000		CY .00217 .00573 .00536		CY . 00255 . 00279 . 00000		CY .00206 .00213 .00394		CY .00229 .00215 .00420
		u.	BETA RUDDER RIORB R	2.00	CLM .05681 .06449 .07035	00.5	CLM .05523 .06382 .06922	00.5 /	CLM .05339 .06151 .06646	7 5.00	.05163 .05385 .06419	00.5 '0	. 05115 . 05115 . 05927 . 06330
	TER DATA		B & - C	AL = -5.00/	CD .07039 .08312 .10593	AL = -5.00,	CD .07053 .08369 .10736	AL = -5.00/	. 07139 . 08559 . 11276	/AL = -5.00	CD . 07251 . 08689 . 11560	" '5.0	CD .07277 .03720 .11598
	1 0251 (ORBITER			GRADIENT INTERVAL	CL 22011 33290 45425 00000	RADIENI	CL .31563 .46909 .00000	3.31 GRADIENT INTERVAL	CL .31691 .39233 .48784	GRADIENT INTERVAL	CL .31379 .39693 .50009	GRADIENT INTERVAL	CL .31246 .38580 .49942
æ	B1 747/1 AT1			3.31 GRA	0.20231 14578 16640		. 2389 - 1817 - 2019		DY - 12141 - 18301 - 00000	3.31 GRA	72 50232 32602 17723	3.31 GRA	07 19568 25501 16164
DATA - CA23B	14-120 (CA23B		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	0x 19173 07957 13358	F.N.L ×	0X 18748 13443 07010	RN/L *	54 10259 07783 15887 .00000	RN/L *	0.00000.	RN/L =	00.00 . 00.033 . 00.001
SOURCE	ARC 1		1109.00 10.00 10.00 10.00	0 /0	ALPHAC .00000 4.00000	0 /0	ALPHAC .00000 P.00000 +.00000	0 0	ALPHAC .00000 .00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	AL PHAC . 69300 2.33000 4.06000
TABULATED		: DATA	XMRP YMPP ZMRP	RUN NO.	MACH .58709 .58728 .58773	RUN NO.	MACH .58694 .58647 .58681	PUN NO.	74CH .58879 .58798 .58967	RUM NO.	мьсн . 58810 . 58819 . 58917	RUN NO.	XACH . DBCH . BCC BC . BCC BCC . OCCO
76		REFERENCE	590.0000 50.F 474.8100 IN. 936.6900 IN.		AL PHAO B.000 10.000 12.000 GRAD IENT		AL PHAO B.000 10.000 12.000 GRAD IENT		ALPHAO 8.000 10.000 12.000 6RAD:ERT		AL PHAC 8,000 10,000 12,000 6PAD:ENT		AL PHAD 8.000 10.000 12.000 6RAD IENT
DATE 23 MAR			SREF # 25 LREF # 4 BREF # 4		02 10.000 10.000 10.000		02 15.000 15.000 15.000		02 30.000 30.000 30.000		02 45.000 45.000		52 53.000 50.000 50.000

ARC 14-120(CA23B) 747/1 ATI 02SI (ORBITER DATA)

(ZNH023) (17 OCT 75)

	5.000 .000 .600		CBL 00091 00101 00125		CBL00115001110013800000		CBL 00115 00130 00144		CBL 00112 00139 00144		CBL -, 00132 -, 00138 -, 00153
PARAMETRIC DATA	STAB ELEVON BOX		CYN .00076 .00068 .00054		CYN .00075 .00066 .00038		CYN .00073 .00066 .00041		CYN .00080 .00051 .00039		CYN .00071 .00062 .00029
			CY .00315 .00319 .00360 .00000		CY .00303 .00306 .00301 .00301		CY .00279 .00335 .00324 .00000		CY .00285 .00271 .00322		CY . 00241 . 00267 . 00296
	BETA REPUBER IN 10RB	27.5.00	CLM .05053 .05978 .06929	0/ 5.00	CLM .04807 .05775 .06670	00.5 //	CLM .04695 .05666 .06614 .00000	0.5.00	CLM . 04558 . 05661 . 06487 . 00000	0/ 5.00	CLM . 04322 . 05344 . 06277 . 00000
		/AL = -5.00/	. 05552 . 05552 . 05581 . 07570	GRADIENT INTERVAL = -5.00/	. 05974 . 05805 . 07755 . 00000	AL = -5.00/	CD . 05996 . 0591 . 07819	AL * -5.00/	CD . 05052 . 05735 . 07934	15.0	CD .06172 .06920 .08321
		GRADIENT INTERVAL	CL .22257 .33397 .33357 .00000		CL .22148 .33644 .00000	GRADIENT INTERVAL	CL .21968 .27487 .34068	GRADIENI INTERVAL	CL .21864 .28273 .34368 .00000	GRADIENT INTERVAL	CL .21781 .28312 .36246 .00000
		3.31 GRA	. 22757 - 26402 - 31779	3.31 GRA	0Y 26758 21541 25423	3.31 GRA	DY 32093 29826 31715	3.31 CRA	07 27717 32458 31952	3.31 GRA[00000.
	0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	00000 .	FN/L =	DX 12617 02447 05141	RN/L =	00000 - 000000 - 000000 - 000000 - 000000	RN/L =	08769 . 08769 . 08181 . 05553	RN/L =	DX 13357 01!56 12743 .00000
	1109.0	0 /0	ALPHAC .00000 P.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 P.00000 4.00000	0 /0	AL PHAC . 00000 2. 00000 4. 00000	0 /0	ALPHAC .00000 2.00000 4.00000
DATA	FT. XMRP YMRP ZMRP	NON NO	MACH .58722 .58696 .58675 .0000	PUN NO.	MACH .58592 .58772 .58744 .06uud	PCN NO.	MACH .58720 .58738 .58743	RCH NO.	34CH .58887 .58732 .58698	PUN NO.	.58737 .58737 .58784 .58784
REFERENCE DAT	2690.0000 SQ.1474.8100 IN. 936.5830 IN.		ALPHAO 5.000 8.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRADIENT		AL PHAC 6.003 8.000 10.000 CHADIENT		AL PHAO 6.000 8.000 10.000 GRADIENT
	SREF ** LREF ** BREF ** SCALE **		02 3.500 3.500 3.500		DZ 7.500 7.500		02 10.000 10.000		02 15.000 15.000 15.000		50 30.000 30.000 30.000

OF ROOR QUALITY

E +33	1 75 1		5.000 .000 .000 .600		CBL001410013000135		CBL 00126 00137 00125	1 75 1		-1.000 .000 .000 .000		CBL 00121 00137 00037		CBL -,00123 -,00115 -,00146
PAGE	(17 001	DATA	STAB # ELEVON # DX # MACH #		.00059 .00045 .00017		CYN .00062 .00052 .00062	1) (17 001	DATA	STAB # ELEVON # DX MACH #		CYN .00075 .00071 .00007		CYN .00078 .00078 .00049
	(ZNH023)	PARAMETRIC	0000.		. 00182 . 00191 . 00236		. 00191 . 00219 . 00219 . 00000	HZDHNZ)	PARAMETRIC	000. 000. 6.000.		.00322 .00380 .00327 .00000		. 00330 . 00330 . 00373 . 00000
			BETA # RUDDER # 10R8 # DY	.00/ 5.00	CLM . 04193 . 05219 . 06099	00/ 5.00	CLM .04166 .05209 .06053			BETA "RUDDER "IORB "DY "	00/ 5.00	CLM .05061 .06040 .06962	00/ 5.00	CLM ,04859 ,05790 ,06737
	(ORBITER DATA)			# 3.	CD . 06271 . 07069 . 08556	L =5.	CD . 06313 . 07114 . 08636	(ORBITER DATA)			ئن	CD .05847 .06437 .07510	",	.05878 .05878 .05494 .07630
	AT1 0251 (OR			GRADIENT INTERVAL	CL .21689 .279612 .7763	GRADIENT INTERVA	CL .21499 .29169 .37701	11 0251			GRADIENT INTERVAL	CL .21814 .33;32 .00000	GRADIENT INTERVAL	CL .21899 .27358 .33503
38	1/247			3.31 GRAI	31603 27867 27362 .00000	3.31 GRA	07 39692 35762 35684 00000	A 1/747 (3.34 GRA	07 05439 04203 01917	3.33 GRA	DY 13760 07570 02463
DATA - CA238	14-120 (CA23B)		0000 0000 0000	RN/L =	0x .08545 .10675 .15959	RN/L =	06326 12785 17777	14-120(CA238		00000 XO	RN/L =		RN/L =	00000 - 1
ATED SOURCE	ARC		1109	0 /0 .	ALPHAC	0 /0 .	ALPHAC .00000 P.00000	ARC		# 1109 # 375	0 /0	ALPHAC00000 . 9 . 000000 . 4 . 000000 . 4	0 /0	ALPHAC .00000 2.00000 4.00000
TABULATED		E DATA	FT. XMRP YMRP ZMRP	S NO	MACH .58641 .58821 .58801	RUN NO	MACH . 58729 . 58829 . 58923		CE DATA	FT. XMRP YMRP ZMRP	RUN NO	MACH . 58555 . 58594 . 58738	RUN NO	MACH .58752 .58737 .58739
R 76		REFERENCE	2690.0000 SQ. 474.8100 IN 936.6800 IN		AL PHAO 6.000 8.000 10.000 GRAD IENT		AL PHAO 6.000 8.000 10.000 GRAD 1ENT		REFERENCE	2690.0000 SQ 474.8100 IN 936.6800 IN		ALPHAO 6.000 8.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRADIENT
DATE 23 MAR			SREF = 21 LREF = 1 BREF = 5		02 45.000 6.000		50.000 50.000 50.000			SREF = 2 LREF = 8 BREF = SCALE =		3.500 3.500 3.500		02 7.500 7.500 7.500

CBL -.00153 -.00156 -.00171 CBL -.00150 -.00170 -.00157 CBL -. 00166 -. 00150 -. 00150 .. 00000 -1.000 (ZNH024) (17 OCT 75 PAGE CYN .00073 .00073 .00040 CYN .00076 .00059 .00046 CYN .00069 .00049 .00033 CYN .00057 .000044 .00029 000024 000028 000028 000028 STAB ELEVON DX PARAMETRIC DATA CY .00261 .00357 .00318 CY .00258 .00249 .00348 CY .00179 .00223 .00275 CY .00195 .00244 .00218 CY .00289 .00275 .00354 CLM .04202 .05242 .06077 CLM .04761 .05750 .06649 CLM .04584 .05588 .06523 .06523 CLM .04353 .05389 .06301 CLM .04173 .05211 .06016 5.00 5.00 BETA RUDOER : 10RB : 5.00 5.00 -5.00/ 5.00 GRADIENT INTERVAL = -5.00/ 3.32 GRADIENT INTERVAL = -5.00/ ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA) CD .05977 .06595 .07805 CD .05915 .06527 .07673 CD .06145 .06859 .08238 .00000 CD .06250 .07037 .08486 CD .06291 .07071 .08530 .00000 GRADIENT INTERVAL . GRADIENT INTERVAL GRADIENT INTERVAL CL .21860 .27490 .33555 CL .21528 .27530 .34261 .00000 CL .21878 .28555 .36139 .00000 CL .21643 .29153 .37290 -.04983 -.02874 -.07593 -.05168 -.00815 -.04740 -.06028 -.07757 -.15908 .00000 -.02820 -.01953 -.08646 -.01767 -.02567 .04641 3.32 3.34 3.32 222 DX -.18388 -.00854 -.07576 DX -.10235 .05297 .00257 0.09908 -.03402 -.11321 -.00000 . 01170 -.14933 -.17441 .0000 IN. 375.0000 IN. * 1/N: = 1/N: * 1/N≥ 3N/L = ALPHAC .00000 2.00000 4.00000 ALPHAC .00000 2.00000 4.00000 ALPHAC .00000 2.00000 4.00000 ALPHAC .00000 2.00000 4.00000 0 6 0 /0 0 6 0 % 85 NO PCN NO PUN NO PUN NO RUN NO 7404 . 59595 . 59569 . 59677 MACH .58782 .58743 .58754 MACH .58804 .58810 .58742 .58757 .58751 .58750 .58750 MACH .58618 .58635 .58739 REFERENCE DATA 2690.3030 SO.FT. 474.8130 IN. 936.6830 IN. ALPHAC 6.000 9.000 10.000 GRADIENT AL PHAO 6.000 8.000 10.000 GRADIENT ALPHAO 6.000 8.000 10.000 GRADIENT ALPHAO 6.000 8.000 10.000 GRADIENT ALPHAO 6.000 8.000 10.000 GRADIENT DZ 10.000 10.000 10.000 02 15.000 15.000 52 45.000 45.000 45.000

+35	75)		-1.000 .000 .000 .600		CBL 00090 00144 00144		CBL 00128 00127 00130		CBL 00151 00138 00117		CBL 00166 00183 00127		CBL 00162 00148 00108
PAGE	(17 001	DATA	STAB ELEVON DOX MACH		.00091 .00053 .00017		. 000003 - 000043 - 000005 - 000000		CYN .00059 .00036 00015		CYN .00064 .00041 00024		CYN .00056 .00036 00023
	(220H02)	PARAMETRIC D	0000.8		CY .00453 .00370 .00445		CY . 00380 . 00456 . 00456		. 00307 . 00307 . 00289 . 00487		CY .00369 .00360 .00410		CY .00295 .00308 .00399
		•	BETA = RUDDER = 10R8 = DY	/ 5.00	CLM .05902 .06701 .07305	00.5 //	CLM .05762 .06533 .07157	00.5 /(CLM .05658 .06384 .07046	0/ 5.00	CLM .05539 .06351 .06939	0/ 5.00	CLM .05296 .06119 .06034
	ITER DATA)			AL * -5.00/	.06702 .086702 .08871 .09871	At = -5.00/	.06765 .08042 .10134	AL = -5.00.	. 06802 . 08043 . 10338	4. =5.0	CD .06865 .08142 .10455	/AL = -5.00/	CD .07046 .08417 .11039
	1 02SI (ORBITE			GRADIENT INTERVAL	CL .3130+ .33157 .4+195	GRADIENT INTERVA	CL .31324 .37663 .44998	GRADIENT INTERVAL	CL 31397 37131 45594 00000	GRADIENT INTERV	CL .31176 .37832 .46087 .00000	GRADIENT INTERVAL	CL .31250 .38439 .47982
æ	1 747/1 ATI			3.34 GRAD	.17360 01841 02214	3.33 GRAD	00000.	3.33 GRAE	08851 .03854 .03091	3.32 GRA	04.068 .04.068 .02535 02535	3.34 GRA	04159 .01715 .01715 03594
DATA - CA238	14-120 (CA23B)		00000 IN. X0	RN/L = 3	08582 - 08582 - 14166 - 05494 00000	FN/L =	0x 09264 09157 06110	RN/L =	030000 - 05050 - 05050 - 05050 - 05055	RN/L =	0x - 11995 - 06631 - 08560	RN/L =	DX 13458 11340 17867
ED SOURCE	ABC		1109.0 0.0 375.0	0 /0	ALPHAC .00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 / 0	ALPHAC .00000 P.00000 4.00000	0 /0	ALPHAC . 00000 4. 00000 . 00000	0 /0	ALPHAC .00000 2.00000 4.00000
TABULATED SOUR		: DATA	7. XMBD 2MBD 2MBD	RUN NO.	MACH . 58688 . 56953 . 58754	BUN NO.	MACH .58725 .58832 .59753	RUN NO.	MACH .58784 .58815 .58774	P.S.2 NO.	MACH . 56598 . 56833 . 58759 . 00000	RUN NO.	MACH .598725 .5989725 .000000000000000000000000000000000000
R 76		REFERENCE DAT	2690.0000 SO.F 474.8100 IN. 936.6800 IN.		AL PHAO B.000 10.000 12.000 GRAD IENT		AL PHAO B.000 10.000 12.000 GRADIENT		AL PHAO 8.000 10.000 12.000 GRAD IENT		AL PHAO B.000 10.000 12.000 GRADIENT		AL PHAO B. 900 10.000 12.000 GRADIENT
DATE 23 MAR			SREF = 2 LREF = 2 BREF = SCALE =		02 3.500 3.500		02 7.500 7.500		02 10.000 10.000 10.000		02 15.000 15.000		02 30.000 30.000 30.000

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1 75 1		000.		CBL 00154 00160 00099		CBL 00129 00146 00112	1 75 1		5.000 .000 .000		CBL 00211 00255 00216		CBL 00224 00233 00222
5) (17 OCT	DATA	STAB ELEVON DX		CYN .00055 .00027 00026		CYN .00055 .00065	7) (17 007	DATA	STAB ** ELEVON ** DX **		CYN 00006 00105 00105		CYN 00009 00005 00099
(2NH025)	PARAME TR 1C	8.000 8.000		CY .00272 .00277 .00363		CY .00223 .00263 .00396	(ZNH027)	PARAME TR 1C	0000.8		. 00585 . 00880 . 00823		CY .00702 .00798 .00872
		BETA RUDDER RICAS R	0/ 5.00	. 051 <i>22</i> . 051 <i>22</i> . 05944 . 00900	5.00	. 05064 . 05912 . 05351 . 00000			BETA R RUDDER 3 10RB R DY	0/ 5.00	0000 00000 70200 70200 70000 10000	5.00	. 04262 . 05100 . 05605 . 00000
(ORBITER DATA)			/AL = -5.00.	CD .07153 .08597 .11407	/AL = -5.00/	CD .07193 .08674 .11484 .00000	(ORBITER DATA)			AL = -5.00	.05216 .05216 .06477 .08486	'AL = -5.00/	00000.
0251			GRADIENT INTERVAL	CL .31148 .39258 .49548 .00000	GRADIENT INTERVAL	.31205 .39501 .49858	1 0351			GRADIENT INTERVAL	CL .31755 .38604 .45945	IENT INTERVAL	CL .31843 .38576 .46349 .00000
B) 747/1 ATI			3. 32 GRAD	70 101594 100000	3.32 GRAD	04207 04207 .01766 .05471	3) 747/1 AT			3.29 GPAD	07762 .07762 .16832 .04725	3.29 GRADIENT	07994 . 07994 . 09838 . 05239
14-120(CA23B)		1000 IN. XO	RN/L	0x 05870 09863 17749	EN/L =	01451 07501 18335	14-120(CA23B)		0000 IN. YO 0000 IN. YO 0000 IN. ZO	RN/L = 3	04747 - 1631: - 20081:	RN/L = 3	DX
ARC		1109.0 .0 .375.0	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 .00000 4.00000	ARC		1109.0 0.0 = 375.0	0 /0	ALPHAC .00000 .000000 .000000 .000000 .000000	0 /0	AL PHAC . 00000 000000 000000
	CE DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .58850 .58832 .58778 .00000	RUN NO.	MACH .58749 .58818 .58760 .06000		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .58488 .58749 .58723	RUN NO.	MACH . 58594 . 58694 . 58659
	REFERENCE DATA	2690.0000 SO. 474.8100 IN. 935.6800 IN.		ALPHAO 8.000 10.000 12.000 GRADIENT		ALPHAO 8.000 10.000 12.000 GRADIENT		REFERENCE DATA	2690.0000 SQ. 474.8100 IN. 936.6800 IN.		ALPHAO 8.000 10.000 12.000 GRADIENT		ALPHAO 8.000 10.000 12.000 GRADIENT
		SREF LREF BREF SCALE		45.000 45.000 45.000		50.000 50.000 50.000			SREF = 2 LREF = BREF = SCALE =		02 3.500 3.500 3.500		02 7.500 7.500 7.500

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437	75)		5.000	000		CBL 00231 00206 00227		CBL 00255 00251 00225		CBL -,00273 -,00244 -,00230		CBL 00264 00256 00256	į	00262 00260 0027 0000
PAGE	17 001	DATA		ELEVON # DX MACH #		CYN 00002 00024 00083		00048 00072 00121		CYN 00036 00064 00121		CYN 00052 00120 00120		CYN - 00034 - 00063 - 00122
	(ZNH027)	PARAMETRIC D				. 00781 . 00702 . 00885		. 00000 . 00016 . 01046		CY .00830 .00805 .01003		CY .00778 .00814 .00952		CY .00815 .00829 .00937 .00000
		à		BETA * RUDDER * 10AB * 0	5.00	CLM .04051 .04892 .05287	/ 5.00	CLM 03908 04773 05162	0/ 5.00	CLM . 03508 . 04392 . 04808 . 00000	0/ 5.00	00000 04334 04334 04625	00/ 5.00	03250 .03250 .04220 .04573
	TER DATA)		•	ш и — О	יר = -5.00/	CD .05231 .06500 .08665	AL = -5.00	00000°.	-5.0	CD . 05382 . 06747 . 09335	L = -5.0	CD . 05479 . 06919 . 09638	AL = -5.	CD . 05489 . 06938 . 09742
	03S1 (ORBITER				ENT INTERVAL	CL .3'963 .36599 .46553 .00000	ENT INTERVA	CL .31725 .38632 .47178	IENT INTERVAL	CL .32024 .39464 .49110	GRADIENT INTERVA	CL .32204 .40193 .50403	GRADIENT INTERV	.31601 .40083 .50748
	747/1 ATI				.29 GRADIENT	08776 .08776 .04639 .06033	.29 GRADIENT	04 04284 04109 04469	.29 GRADIENT	03346 .03346 .06309 .02846	. 30	00509 .00509 .005027 -000882	3.30 GRAC	04160 .05879 .05876 .07356
07640 - 4740	ຸ່ວ			00 IN. X0 00 IN. Y0 00 IN. Z0	RN/L = 3.	0x 15926 06494 07448	FN/L = 3	151	RN/L = 3	70 - 13749 - 16994 - 12824 - 00000	RN/L = 3	x0 477770 08593 165050	= 1/Nd	0X -0440. -105536 -15559.
Ç	SUURLE ARC 1	•		000.275 = 375.000	0 /0	ALPHAC . 00000 2.00000 4.00000	2	_ ₹ 8888	0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 Z.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000
1	TABULATED		DATA	T. XMRP YMRP ZMRP	NO.		2	MACH .58657 .58706 .58624 .06000	SCN NO.		N KING	MACH . 58545 . 58604 . 58548	NOS NO	KACH .58502 .58552 .58532 .00000
	76		REFERENCE	2590.0000 50.F. 474.8100 1N. 936.6800 1N.		AL PHAO 8.000 10.000 12.000 GRADIENT		ALPHAO 8.000 10.000 12.000 GRADIENT		A! PHAO 8.000 10.000 12.000 6RAD ENT		AL PHAO B.000 10.000 12.000 GRADIENI		AL PHAO 8.000 10.000 12.000 GRAD1ENT
	DATE 23 MAR			SREF = 26 LREF = 4 BREF = 9	1	000 10.000 10.000 10.000		02 15.000 15.000		02 30.000 30.000 30.000		000 45.000 45.000		02 50.000 50.000 50.000

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£ 33	1 75)		5.000 .000 .000 .500		CBL 00197 00213 00259		CBL 00226 00266 00266		CBL 00240 00230 00276		CBL 00238 00244 00269		CBL 00270 00260 00279
PAGE	0 (17 00)	DATA	STAB E ELEVON E DX E MACH E		CYN 00048 00052 00053		CYN 00067 00052 00065		CYN 00043 00050 00071		CYN -,00056 -,00062 -,00064		CYN 00052 00046 00095
	(YEDHUZ)	PARAMETR1C	0000.9		. 00872 . 00923 . 00915		. 00901 . 00867 . 00859		. 00867 . 00861 . 00851		. 00856 . 00864 . 00864		. 008975 . 00885 . 00838
			BETA * RUDDER # 10RB * DY	0/ 5.00	. 00000	00.5 /0	CLM .03335 .04351 .05363	0/ 5.00	. 03094 . 04135 . 05189	00.5 /0	CLM .02750 .03838 .04896	0/ 5.00	. 02487 . 03716 . 04669
	(ORBITER DATA)			/AL = -5.00.	.04049 .04658 .05678	/AL = -5.00,	. 04105 . 04741 . 05790	/AL = -5.00	.04094 .04780 .05864 .00000	/AL ≠ -5.00.	CD .04167 .04839 .05986	/AL = -5.00/	. 05086 . 05086 . 05380 . 00000
	0351			GRADIENT INTERVAL	CL .22059 .27435 .32858	GRADIENT INTERVAL	CL .22249 .27928 .33713	GRADIENT INTERVA	CL .22249 .37866 .34123	GRADIENT INTERVA	CL . 22 198 . 38256 . 34570	GRADIENT INTERVAL	CL .22516 .29348 .36657 .00000
38	B) 747/1 AT!			3.29 GRAD	01652 - 01652 - 08260 - 01949	3.29 GRAD	02782 04782 04800 00000	3.29 GRAD	07 02445 03676 06593	3.29 GRAD	0Y 05005 05788 07621	3.29 GRAD	0Y 00569 04001 09332
DATA - CA238	14-120(CA23B		00000 IN. XO 00000 IN. YO 00000 IN. ZO	RN/L =		F.N.L =	0x 10221 05748 00159	RN/L =	020950 .05662 .03795	RN/L =	00000.	EN/L =	DX 05173 .02.90 07390
TED SOURCE	ARC		# 1109.0 # 375.0	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC . 00000	0 /0	ALPHAC . 00000 4. 00000	0 /0	ALPHAC .00300 4.00000 .00000
TABULATED		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .58836 .58780 .58729	RUN NO.	MACH .58714 .58690 .58754	RUN NO.	MACH .58771 .58687 .58669	RUN NO.	MACH .58751 .58668 .58727 .00000	RUN NO.	MACH .58634 .58733 .00000
MAR 76		REFERENCE DATA	2690.0000 50.8 474.8100 1N. 935.6800 1N.		AL PHAO 6.000 8.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRADIENT		AL PHAO 6.000 8.000 10.000 GRAD I ENT		ALPHAO 6.000 8.000 10.000 GRADIENT		ALPHAD 6.000 8.000 10.000 GRADIENT
DATE 23 M			SREF SREF BREF SCALE		02 3.500 3.500 3.500		02 7.500 7.500 7.500		10.000 10.000 10.000		02 15.000 15.000		30.000 30.000 30.000

£4.	1 275 1		5.000 .000 .000 .600		CBL 00266 00266 00249		CBL 00235 00257 00267 .00000	T 75 1		5.000 .000 .000 .600		CBL 00205 00195 00200		CBL 00214 00203 00209
PAGE	(17 001	DATA	STAB # ELEVON # DX # MACH #	ď	CYN 00077 00069		CYN 00063 00058 00083	(17 OCT	DATA	STAB ELEVON BOX MACH		CYN 00010 00013 00018		.00004 00002 000021 000021
	(ZNH034)	PARAMETR1C	000.		. 00782 . 00782 . 00811 . 00097		. 00033 . 000833 . 00000	(280HNZ)	PARAMETRIC	0000 		CY .00754 .00724 .00688		. 00729 . 00729 . 00539 . 00639
			BETA BRUDDER BIORB BOY	00.5 /	CLM .02348 .03553 .04530	5.00	CLM .02306 .03528 .04512			BETA = RUDDER = 10RB = 0Y	00/ 5.00	CLM . 02780 . 03437 . 04281	00/ 2.00	CLM .02242 .02937 .03810
	(ORBLIER DATA)			AL = -5.00	.04281 .05231 .05628 .06628	AL = -5.00/	. 04419 . 05249 . 06693	(ORBITER DATA)			* -5	CD .03600 .03858 .04434	. = -5.	CD .03555 .03903 .04530
	0351			IENT INTERVA	CL . 22.395 . 37875 . 37875	GRADIENT INTERVAL	CL .22195 .29975 .38170	1 0351			GRADIENT INTERVAL	.11481 .17249 .23150	DIENT INTERVAL	CL .11820 .17817 .23795 .00000
œ	1 747/1 ATI			.30 GRADIENT	05004 05004 06050	.30	01188 02287 05059	14 1/747 (E			3.29 GRAD	05157 .05157 .03346 .00000	3.29 GRAD1	. 05294 . 05716 . 06897 . 00000
DATA - CA23B	14-120 (CA23B)		0000 IN. YO 0000 IN. YO 0000 IN. ZO	RN/L = 3	01533 01533 15392 15392	FIN/L = 3	05894 - 164432 - 16743	14-120 (CA23B		1000 IN. XO 1000 IN. YO 1000 IN. ZO	RN/L #	0x 07973 015.08 03882	RN/L =	0X 16589 .07436 00439
TED SOURCE	ARC 1		# 1109,00 # .00 # 375.00	0 /0	ALPHAC .00000 4.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	ARC		# 1109.0 # 375.0	0 /0	ALPHAC .00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000
TABULATE		E DATA	XMRP YMPP ZMRP	RUN NO.	MACH .58727 .58711 .58752	RUN NO.	MACH .58796 .58812 .58765		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .58695 .58770 .58780	RUN NO.	MACH .58699 .58732 .58723
IR 75	-	PEFERENCE DA	2690.0000 SO.F. 474.8100 IN. 936.6800 IN.		ALPHAO 6.000 9.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRAD IENT		REFERENCE DATA	2690.0000 SO. 474.8100 IN. 936.6800 IN.		4. PHAO 4.000 8.000 8.000 GRADIENT		ALPHAO 9.000 9.000 08.000
DATE 23 MA			SREF = 2 LREF = BREF = SCALE =		02 45.000 45.000 45.000		50.000 50.000 50.000			SREF = 6 LREF = 8 BREF = SCALE =		3.500 3.500 3.500		DZ 7.500 7.500 7.500

1. 27.		000 000 000 000		CBL 00210 00216 00285		CBL -,00239 -,00234 -,00219		CBL 00232 00230 00230		CBL		CBL 00227 00230 00248
35) (17 OCT	DATA	STAB ELEVON BOX				CYN . 00000 - 00029 - 00016		CYN -,00011 -,00035 -,00035		CYN 00036 00044 00057		CYN 00048 00063 00066
(ZNH032)	PARAMETRIC	00000		. 00704 . 00705 . 00665		. 00702 . 00669 . 00651		. 00646 . 00662 . 00605		CY .00586 .00557 .00554		CY .00566 .00511 .00536
		BETA REUDDER IORB	1/ 5.00	CLM .02020 .02759 .03712	1/ 5.00	CLM .01751 .02525 .03499	1/ 5.00	CLM .01418 .02271 .03392	1/ 5.00	CLM .01345 .02163 .03281	1/ 5.00	CLM .01327 .02131 .03226
(ORBITER DATA)			/AL = -5.00,	CD . 03675 . 03951 . 04598	/AL = -5.00/	CD .03745 .04068 .04725	/AL = -5.00/	CD . 03888 . 04305 . 05066	/AL = -5.00,	CD . 03936 . 04460 . 05279	/AL = -5.00/	. 04016 . 04505 . 04505 . 05341
AT1 0351 (OR			GRADIENT INTERVAL	CL .18330 .18680 .24661 .0000	GRADIENT INTERVAL	CL .12580 .19044 .25217 .00000	GRADIENT INTERVA	CL .12646 .20053 .27027 .00000	GRADIENT INTERVAL	CL .13089 .23489 .28194	GRADIENT INTERVA	CL .13259 .20550 .28480
747/1			3.29 GRA	07 05689 07970	3.29 GRA	06725 .06725 .07796 .01371	3.29 GRA[00000°.	3.30 GRA	. 10000 . 04855 . 00955	3.30 GRA	08025 .08529 .03100
14-120(CA238)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L	07609. - 07609. - 10970. - 000000.	F.N.L =	DX 17434 05427 07067	RN/L =	DX 07086 10285 16552 .00000	RN/L =	04568 13136 19234 00000	RN/L =	. 05959 -,16;86 -,20141
ARC		1109.0 .0 .a 375.0	0 /0	ALPHAC .00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC.000000.00000000000000000000000000000	0 /0	ALPHAC .00000 2.00000 4.00000
	E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .58779 .58794 .58841	RUN NO.	MACH .58849 .58824 .58819	RUN NO.	MACH .58969 .58898 .58898	RUN NO.	MACH .58793 .58837 .58880	RUN NO.	MACH .58712 .58810 .58850
	REFERENCE DATA	2590.0000 SO.FT 474.8100 IN. 935.6800 IN.		AL PHAO 4. C00 6. 330 8. 000 GRADIENT		ALPHAO 4.000 6.000 8.000 GRADIENT		AL PHAO 4.000 6.000 8.000 GRADIENT		AL PHAO 4.000 5.000 8.000 GRAD!ENT		AL PHAO 4.000 6.000 8.000 GRADIENT
		SREF SEREF SCALE SCALE		02 10.000 10.000 10.000		02 15,000 15,000		02 30.000 30.000 30.000		02 45.000 45.000 45.000		50.000 50.000 50.000

_ _ _	75)		5.000 .000 .000 .800		CBL 00217 00269		CBL 00225 00256 .00000		CBL 00247 00287 .00000		CBL 00240 00272 .00000		CBL 00236 00280 .00000		CBL 00262 00293
PAGE	(17 OCT	DATA	STAB # ELEVON # DX # MACH #		CYN 00062 00067		CYN 00050 00043		CYN -,00019 -,00043		CYN 00005 00047		. 000021 - 000046 - 00000		CYN -,00040 -,00059
	(ZNH036	PARAMETRIC (.000 .000 .000 .000 .000		. 00000 . 00906 . 00000		. 00858 . 00917 . 00000		. 00000 . 00929 . 00000		.00003 .00870 .00000		. 00915 . 00988 . 00000		.00851 .00879 .00000
		u	BETA RUDDER BIORB R	5.00	CLM . 04804 . 05865 . 00000	/ 5.00	. 04746 . 05604 . 00000	/ 5.00	CLM . 04302 . 05135	7 5.00	CLM . 04029 . 03000	00 2 /0	CLM .03803 .04706 .03000	5.00	.03616 .04464 .00000
	(TER DATA)		BE - 13	AL * -5.00/	.04740 .05814 .00000	AL = -5.00/	. 00000	/AL ≈ -5.00	00000. 00000.	VAL = -5.00.	CD . 04992 . 06043 . 00000	VAL = -5.00	CD 5072. 06161.	WAL = -5.00	CD , 05290 , 06587 , 00000
	1 03S1 (ORBITER			GRADIENT INTERVA	CL .27133 .32815 .00000	GRADIENT INTERVAL	CL .28277 .33033 .00000	GRADIENT INTERVAL	cl .29056 .34017 .00000	GRADIENT INTERVAL	CL .28988 .3+493 .00000	GRADIENT INTERVAL	CL .29245 .35126 .00000	GRADIENT INTERVAL	CL .30570 .37249 .00000
88	3) 747/1 ATI			3.31 GRAD	70 19679. 77185.	3.31 GRAE	70 15931. 16359	3.30 GRA	07 . 19517 . 19517	3.30 GRA	07 . 20959 . 17741 . 00000	3.30 GRA	07 . 20626 . 14240 . 00000	3.29 GR/	07 . 18027 . 12485 . 00000
DATA - CA23B	14-120(CA23B)		000 IN. YO	RN/L =	0X 05230 19095 .00000	RN/L =	DX 13248 06137	RN/L =	DX 10972 00644	RN/L =	0X 12131 05014 00000	RN/L =	XQ 09853- 003300-	RN/L =	0x 17938 15382
TED SOURCE	ARC		1109.00 2.00.00	361/ 0	ALPHAC 2.00000 4.00000	362/ 0	ALPHAC 2.00000 4.00000	363/0	ALPHAC 2.00000 4.00000	364/0	ALPHAC 2.00000 4.00000	. 365/ 0	ALPHAC 2.00000 4.00000	. 365/ 0	ALPHAC 2.00030 4.00000
TABULATE		E DATA	FT. XMRP YMRP I. ZMRP	RUN NO.	MACH .58715 .58790 .00000	RUN NO.	MACH . 58749 . 58652 . 00000	RUN NO.	MACH .58730 .58642	RUN NO.	MACH .58578 .58622	RUN NO	MACH .58596 .58533	NO NO	MACH . 58552 . 58513
3 76		REFERENCE DATA	690.0000 SO 474.8100 IN 936.6800 IN		ALPHAO 7.903 10.016 GRADIENT		ALPHAO 8.096 9.922 GRADIENT		ALPHAO 8.104 9.932 GRADIENT		AL PHAO B.096 9.970 GRAD I EN I		ALPHAO B.062 9.922 GRADIENT		AL PHAO 8.093 9.966 GRAD I ENT
DATE 23 MAR			SREF LREF BREF SCALE		02 2.000 2.000		02 3.500 3.500		02 7.500 7.500		050.01		02 15.000 15.000		50 30.000 30.000

3E 448	1 75)		5.000 .000 .000))	CBL 00250 00269		CBL 00237 00264		CBL 00247 00260		n n	000.1-	8	CBL 00176 00210 00228
PAGE	6) (17 001	DATA	STAB ELEVON # DX MACH #		CYN - 000042	9	CYN 00028 00078		CYN 00023 00063	-		STAB # ELEVON # # # # # # # # # # # # # # # # # # #		CYN -,00014 -,00062 -,00052
	(ZNH036)	PARAME TRIC	.000 6.000 .000		CY .00842 .00880		CY .00835 .00857 .00000		CY .00814 .00848	7 0 MIN 2 7		ر		. 00809 . 00770 . 00816
			BETA RUDDER RIONB RIONB	00/ 2/00	CLM .03392 .04319	00/ 2.00	CLM .03272 .04244 .00000	00/ 5.00	CLM .03331 .04158			BETA BODER # 10RB B	5.00	. 03820 . 04954 . 05931 . 00000
	(ORBITER DATA)			#	CD .05507 .06840 .00000	ı,	CD . 05512 . 06943 . 00000	# (č.	CD .05561 .07011	(ORCLIER DATA)			AL = -5.00/	.04009 .04675 .05643
	AT1 0351 (OF			GRADIENT INTERVAL	CL . 33734 . 33232 . 03000	GRADIENT INTERVAL	CL .30410 .38762 .00000	GRADIENT INTERVAL	CL .31216 .39004 .00000	0351			GRADIENT INTERVAL	CL . 21229 . 36910 . 32436 . 00000
	1/247			3.29 GRA	DY . 16996 . 15528 . 00000	3.30 GRA	07 .16650 .15991	3.30 GRA	00000.	3) 747/1 AT1			3.33 GRAD	. 10330 . 07589 . 06050
	14-120(CA23B)		00000 IN. X0	RN/L	0x 10214 10214	RN/L =	09440 09832 .00000	RN/L =	.01489 05197 05000	14-120(CA23B		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L = 3	0x 11180 08329 11084
	ARC		1109.	. 367/ 0	ALPHAC 2.00000 4.00000	. 368/ 0	ALPHAC 2.00000 4.00000 .00000	369/ 0	AL PHAC 2.00000 4.00000	ARC		1109.00 2 .00 375.00	371/ 0	ALPHAC .00000 2.00000 4.00000
		NA L	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	MACH .58535 .58620 .00000	RUN NO	MACH .58475 .58452	FOR NO	3ACH . 58490 . 58408 . 00000		E DATA	KT. XMRP YMRP ZMRP	RUN NO.	7.400 .58985 .59004 .59071
	i i i	אכיי באבוא	5000 500 500 500 500 500 500 500 500 50		ALPHAO B.118 9.974 GRADIENT		ALPHAO 8.072 9.962 GRADIENT		AL PHAO B.098 9.963 GRADIENT		REFERENCE	2690.0000 SQ. 474.81C0 IN. 935.6800 IN.		ALPHAO 5.775 7.930 9.942 6RAD I ENT
		,	LREF SCALE		02 45.000 45.000		02 50.000 50.000		60.000 60.000 60.000			SREF = 2 LREF = BREF = SCALE =		000.8 000.8 000.8 000.8

£443	75)		-1.000 .000 .000 .000		CBL 00206 00212 00235		CBL -,00226 -,00239 -,00280		CBL 00221 00226 00274		CBL 00232 00244 00267 .00000		CBL 00247 00247 00255
PAGE	(17 OCT	ATA	STAB # ELEVON # DX # MACH #		CYN .00012 00024 00025	•	- 000012 - 000002 - 000044		CYN -,00020 -,00022 -,00043		CYN 00012 00019 00064		CYN 00024 00055 00055
	(ZNH037)	PARAMETRIC D	0000a		. 00931 . 00953 . 00873		CY .00882 .00906 .00825		CY .00862 .00784 .00803		CY .00855 .00780 .00780		.00812 .00809 .00803
		a .	BETA ERUDDER E 10RB EDY	5.00	CLM .03876 .04751 .05718	5.00	CLM .03262 .04278 .05296	5.00	.03080 .04033 .05071	/ 5.00	.02796 .03726 .04770	7 5.00	. 02433 . 02433 . 03502 . 04567 . 00000
	TER DATA)		m € ~ Ω	4L = -5,00/	CD . 04194 . 05657 . 05636	AL = -5.00/	CD .04178 .04715 .05782	AL = -5.00/	00000.	/AL = -5.00/	CD .04261 .05951 .05951	/AL = -5.00/	CD . 04426 . 05083 . 06418
	1 0351 (ORBITER			GRADIENT INTERVAL	CL .22978 .26819 .32421 .00000	GRADIENT INTERVAL	CL . 22509 . 32595 . 00000	DIENT INTERVA	CL .23251 .27349 .33806	GRADIENT INTERVAL	CL .23524 .27616 .34191	GRADIENT INTERVAL	CL . 23396 . 28703 . 36445
	1747/1 ATI			3.32 GRAD	70 15769 14028 13338 00000	3.32 GRAD	70 - 19754 - 13415 - 10683 - 100000	3.31 GRAD	09917 1221. 200000	3.31 GRA	77. 1.3277 96929 903090	3.32 GRA	. 12170 . 11609 . 08909
DATA - CA23B	14-120(CA23B)		1000 1N. X0 1000 1N. Y0 1000 1N. Z0	RN/L=	XO 00000 00000 00000	EN/L =	0x - 07039 - 05889 - 05310 -	RN/L =	0x 	RN/L =	00000. 1,4564. 1,456. 1,00000.	RN/L =	0x0 51251 51352 70150
TABULATED SOURCE	U		1109.00 8	372/ 0	A. PHAC . 00000 P. 00000 4. 00000	373/ 0	ALPHAC .00000 2.00000 4.00000	374/ 0	ALPHAC .00000 4.00000	375/ 0	Al. PHAC . 90000 2.00000 4.00000	376/ 0	ALPHAC00000 2.00000 4.000000
TABULAT		DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH .59018 .59038 .59033	RUN NO.	MACH . 58950 . 58960 . 58902 . 06000	RUN NO.	MACH .58846 .58936 .58870	RUN NO.	МАСН .58908 .58978 .58882	SUN NO	MACH .58881 .58820 .58887
76		REFERENCE DATA	2690,0000 50.F 474,8100 IN. 936,6800 IN.		AL PHAO 6.184 7.923 9.915 GRADIENT		ALPHAO 6.130 7.940 9.945 GRADIENT		ALPHAO 6.172 7.932 9.931 GRADIENT		ALPHAO 6.191 7.927 9.914 GRADIENT		ALPHAO 6.149 7.943 9.949 GRADIENT
DATE 23 MAR	}		SREF LREF BREF SCALE		02 3.500 3.500		02 7.500 7.500 7.500		02 10.000 10.000 10.000		02 15.000 15.000		02 30.000 30.000 30.000

777	(57)		0000.		CBL00255002610025700000		CBL00245002380023700037		CBL 00240 00241 00237	1 75 1		5.000 5.000 6000		CBL 00088 00139 00139
a .	1 (17 001	DATA	STAB ELEVON NOX		CYN 00040 00034 00071		CYN -,00037 -,00038 -,00083		CYN 00054 00048 00080	1) (17 OCT	DATA	STAB FELEVON BOX MACH		CYN .0009B .0007B .00065
	(ZNH037	PARAME TR I C	. 000 . 000 . 000		. 00789 . 00809 . 00804		. 00760 . 00781 . 00781 . 00030		CY .00735 .00736 .00730	(8£0HNZ)	PARAMETRIC	0000.		CY .00477 .00479 .00456
			BETA RUDDER 10RB DY	00/ 5.00	. 03456 . 03456 . 04424 . 00000	0/ 5.00	CLM .02247 .03379 .04346	00.5 /0	CLM . 02184 . 03270 . 04258			BETA RUDDER 1	0/ 5.00	00141 00141 .00765 .01674
	(ORBITER DATA)			ii Ru	.04503 .05241 .06667 .00000	'AL = -5.00,	. 04549 . 05313 . 06743	AL = -5.00	.04584 .05369 .06817 .00000	(ORBITER DATA)			'AL = -5.00	. 05245 . 05245 . 06046 . 07469
	0351			GRADIENT INTERVAL	CL . 22558 . 29554 . 37912 . 00000	GRADIENT INTERVAL	CL .23635 .29763 .37992	GRADIENT INTERVAL	CL .23543 .29885 .38294 .00000	TI 0351 (ORB			GRADIENT INTERVA	.31463 .36410 .42438 .00000
æ	1747/1 AT			. 32	07487 .07487 .08152 .11615	. 31	05306 .12658 .11732	.31	. 10470 . 10470 . 11574 . 09894 . 00000	A 1747 1			₹	08842 . 09886 . 09886 . 09314
DATA - CA238	14-1201CA23B		0000 IN. YO	RN/L = 3	DX 05037 25014 12897	R14/L = 3	DX 01302 23513 21663	RN/L = 3	00000	14-;20(CA23B		00000 IN. YO	RN/L = 3	DX 17966 01417 08135
TED SOURCE	ARC		1109.0	377/ 0	ALPHAC . 000000 4. 000000 . 000000	378/ 0	ALPHAC .00000 4.00000	379/ 0	ALPHAC . 00000 4. 00000	ARC		. 1109.0000 . 0000 . 375.0000	381/ 0	ALPHAC .00000 2.00000 4.00000
TABULATED		E DATA	T. XMRP YMRP ZMRP	RUN NO.	МАСН .58833 .58991 .58898	RUN NO.	MACH .58795 .58783 .58783	RUN NO.	MACH .58741 .58683 .58754 .00000		DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH .58940 .58902 .58915
MAR 76		REFERENCE DATA	2690.0000 50.F1 474.8100 IN. 936.6800 IN.		ALPHAO 6.168 7.947 9.954 GRADIENT		ALPHAO 6.177 7.977 9.944 GRADIENT		ALPHAO 6.130 7.968 9.927 GRAD!ENT		PEFERENCE	269C.0000 SQ.F. 474.8100 IN. 936.6800 IN.		AL PHAO 6.002 7.874 9.948 GRADIENT
DATE 23 MA			SREF C		02 45.000 45.000		50.000 50.000 50.000		DZ 60.000 60.000 60.000			SREF = G		02 8.000 8.000

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CBL -.00144 -.00149 -.00169 ..00134 ..00152 ..00170 CBL -.00121 -.00142 -.00167 CBL -.00094 -.00142 -.00142 CBL -.00111 -.00133 -.00174 5.000 5.000 .000 ななり 5 PAGE .00129 .00129 .00129 CYN .00100 .00099 .00098 CYN .00120 .00127 .00117 .00107 .00124 .00111 STAB ELEVON DX MACH PARAMETRIC DATA (820HNZ) CY .00%22 .00385 .00398 .000426 .00436 .00419 CY .00459 .00440 .00423 CY .00425 .00420 .00000 .00470 .00473 .00473 .000 .000 6.000 CLM ..00198 .00580 .01394 CLM -.01586 -.00679 .00141 CLM -.01106 -.00560 .00574 CLM -.01419 -.00474 .00394 CLM -.00803 -.00045 .00006 5.30 5.00 5.00 5.00 5.00 BETA RUDDER 10RB DY ± -5.00/ --5.00/ -5.00/ -5.00/ -5.007 CD .05385 .06199 .07679 CD .05414 .06266 .07847 .00960 747/1 AT1 0351 (ORBITER DATA) CD .05234 .05033 .07454 CD .05546 .06510 .08268 .00000 CD .05316 .06073 .07597 GRADIENT INTERVAL GRADIENT INTERVAL GRADIENT INTERVAL GRADIENT INTERVAL GRADIENT INTERVAL CL .32521 .37970 .44988 CL .33254 .39102 .46595 CL .33171 .37202 .43925 .00000 32780 32780 36319 42598 CL .33252 .37711 .44149 09200 .09200 .07523 .04895 04749 .06002 .06744 .04749 DY .01898 .06586 .07591 .10119 .094**33** .05269 .06097 .09080 .09113 3.32 3.32 3.33 APC 14-120(CA239) TABULATED SOURCE DATA - CA23B 222 78011.-07630.-00808.-DX -.09595 -.03968 -.16735 DX -.2228 .06212 -.03790 DX --24754 .00331 --07357 DX -.19953 -.03982 -.05491 z z z RNZ RN/L 1109.0050 10000. 375.0000 ALPHAC .00000 2.00000 4.00000 ALPHAC .00000 2.00000 4.00000 ALPHAC .00000 2.00000 4.00000 ALPHAC .00000 2.00000 4.00000 ALPHAC . 000000 . 000000 4 . 000000 386/ 0 395/ 0 384/ 0 383/ 392/ RUN NO. SCN NO XMRP YMRP ZMRP RCN NO PUN NO S S S S MACH .58680 .58732 .58723 MACH .58938 .58846 .58817 .00000 MACH .58577 .58613 .58605 MACH .58831 .58841 .58680 MACH .58761 .58683 .58650 PEFERENCE DATA S . . . 4LPHA0 6.183 7.925 9.927 GRAD:ENI ALPHAD 6, 193 7, 361 9, 938 08,938 ALPHAO 6.214 7.874 9.904 0RADIENT ALPHAO 6.153 7.925 9.969 GRADIENT ALPHAO 6.221 7.924 9.923 6233 25690.06009.9474.8100.9828.6909.985.00 02 30.000 30.000 30.000 02 3.500 3.500 3.500 02 7.500 7.500 7.500 02 10.000 10.000 02 15.000 15.000 SPEF LREF BREF SCALE

ARC 14-120(CA23B) 747/1 ATI 03SI (ORBITER DATA)

(ZNH038) (17 0CT 75)

						٠								
, 77 1		5.000	.000.))	CBL 00138 00155 00167	00000.	CBL 00157 00162	00000.	CBL 00158 00161 00165	(5/ 1		5.000 5.000	nng.	CBL 00069 00108
130 (17 001		STAB	ELEVON # DX MACH #		.00110 .00110 .00100	00000	. 00084 . 00109 . 00109	00000	CYN .00100 .00112 .00120	17 001	DATA	STAB # ELEVON # DX #		CYN . 00125 . 00081
(ZNH038)		PARAMETRIC	6.000 6.000 000.000		. 00408 . 00418 . 003552	0000	. 00365 .00374 .00389		CY .00400 .00378 .00350	(\$2NHD 39)	PARAMETRIC	6.000		CY .00014 .00406 .000406
2		,	RODULK # 10RB # 10RB	-5.00/ 5.00	0 ; ; ;	_	0 ; ; ; .	5.00/ 5.00	7.000 7.000 7.000 7.000			BETA # RUDDER # 10RB # DY	0/ 12:00	C
USSI (ORBITER DATA					. 05648 . 06685 . 08483	•	CD . 056 . 066 . 086	#	CD . 05675 . 06738 . 07799	ORBITER DATA			VAL = -5.00/	CD . C778 . 0934 . 0000
A 1 1 0351 (0				GRADIENT INTERVAL	CL .32970 .33258 .47649	GRADIENT INTERVAL	CL .32762 .39648 .48261 .00000	GRADIENT INTERVAL	CL .31994 .39198 .46389	ATI 0251 (0R			GRADIENT INTERVAL	CL .35168 .41699
				3.31 GR/	DY . 06736 . 08859 . 03891	3.30 GRA	797 11797 52790 . 589993	3.30 GRA	DY . 12373 . 08440 . 05094	1747/1			.35	. 07823 . 07823 . 00540
100.01		0000 IN. XO	ż	RN/L =	DX 10562 05553 17347 .00000	FN/L =	. 15610 - 14575 - 18128 - 00000	RN/L =	. 14152 06113 21350	14-120(CA238	:	000 IN. YO	RN/L = 3	08042 08042 04830
		. 1109.	375.	. 387/ 0	ALPHAC. 000000. 4 0000000. 4 00000000.	. 388/ 0	ALPHAC . 000000 000000 000000	3397 0	ALFHAC COCCCC COCCCCCCCCCCCCCCCCCCCCCCCCCCC	ARC	(3.20.1 0.375.	391/0	1000 1000 1000 1000 4000 1000
	CE DATA	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		NO NO	#ACH : 595551 : 596557 : 00000	ON NO	MACH . 58489 . 58451 . 58451 . 00000	RCZ NO	MACH . 58455 . 58455 . 58431 . 0000	E DA⊺A		•	RUN NO.	#ACH - 590005 - 590005 - 000000
	REFERENCE DAT	2690.0000 SQ 474.8100 IN			AL PHAO 6.149 7.962 9.950 GRADIENT		ALPHAO 6.112 7.928 9.984 GRADIENT		ALPHAO 6.088 7.843 9.583 GRADIENI	REFERENCE DA	5590.0000 53	474.8100 IN. 936.6800 IN.		ALPHAO 7.8+8 9.933 GRADIENT
		SREF LREF BREF	1		02 45,000 45,000		50.000 50.000 50.000		52 50.000 60.000 60.000		Ħ	LREF = BREF = SCALE *		02 3.500 3.500

DRIGINALI PAGE IS OF POOR QUALITY

744	15)		5.000	. 600		CBL 00092 00150		CBL 00102 00131 .00000		CBL 00099 00139 .00000		CBL 00121 00150		CBL 00131 00157 .00000		CBL 00122 00141 .00000
PAGE	(17 001	DATA	STAB = ELEVON =	DX MACH #	ć	. 00125 . 00032 . 00000		CYN .00115 .00090		. 00112 . 00090 . 00000		.00101 .00101 .00000.		CYN .00096 .00076		. 00096 . 00068 . 00000
	(ZNH039	PARAMETRIC (000.01	000		. 00496 . 00516 . 00000		CY .00458 .00000		.00421 .00446 .00000		.00378 .00397 .00000		CY .00363 .00423 .00000		.00345 .00367 .00000
		à	œ	TORB #	5.00	.02273 .02979 .00000	5.00	CLM .02194 .02830 .00000	5.00	CLM .02067 .02729 .00000	00.5 /	CLM .01825 .02536 .00000	/ 5.00	CLM .01699 .02305	/ 5.00	CLM .01649 .02232
	TER DATA)		15. 62	<u>~ a</u>	AL = -5.00/	. 08097 . 09540 . 00000	AL = -5.00/	. 08177 . 09578 . 00000	AL = -5.00/	CD .08268 .09719 .00000	/AL = -5.00/	03000. 08489 010190.	/AL = -5.00/	.08613 .10378 .00000	VAL = -5.00/	.08661 .10469 .00000
	1 02S1 (ORBITE				GRADIENT INTERVAL	CL .36881 .42955 .00000	GRADIENT INTERVAL	CL .37211 .42649 .00000	ADIENT INTERVA	CL .37467 .43335 .00000	GRADIENT INTERVA	CL .37911 .45672 .00000	GRADIENT INTERVAL	CL .38512 .46284 .00000	GRADIENT INTERVAL	CL .38625 .46638 .00000
m	747/1 AT1				₹.	. 10879 . 06301 . 00000	.34	70 .06157 .05457 .00000	3.34 GRAE	07 .05451 .05130	3.33 GRA	70 09329 62690.	3.33 GRA	08085 08246 00000	3.33 CRA	77 .05986 .05656 .00000
DATA - CA238	4-120(CA23B)		00 IN.		RN/L = 3	0X 14945 06435 00000.	RN/L = 3	DX 16229 08977	RN/L =	0X 20524 10508 .00000	RN/L =	00000.	RN/L =	08100 11160 11160	RN/L =	0X 01490 05865
TABULATED SOURCE (ARC 1		1109.000	375.00	392/ 0	ALPHAC 2.00000 4.00000	393/ 0	ALPHAC 2.00000 4.00000	394/0	ALPHAC 2.00000 4.00000	395/ 0	ALPHAC 2.00000 4.00000	396/ 0	ALPHAC 2.00000 4.00000	0 //62	ALPHAC 2.00000 4.00000
TABULAT		DATA	T. XMRP		RUN NO.	MACH .58973 .58994 .00000	RUN NO.	MACH .59037 .59072	RUN NO.	MACH .59084 .59115	RUN NO.	MACH .59009 .59121	RUN NO.	MACH .58969 .59111	RUN NO	MACH . 59072 . 59086 . 00000
3 76		PEFERENCE DATA	2590.0000 SQ.FT	936.6300 IN.		AL PHAO 8.094 9.953 GRADIENT		AL PHAO 8.098 9.970 GRADIENT		ALPHAO 8.118 9.959 GRADIENT		ALPHAO 8.076 9.951 GRAD1ENT		AL PHAO 8.057 9.963 GRADJENT		ALPHAO B.085 9.989 GRADIENT
DATE 23 MAR	;		SREF	، بر بر ليا		02 7.500 7.500		02 10.000 10.000	***	02 15.000 15.000		02 30.000 30.000		02 45.000 45.000		DZ 50.000 50.000

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(ZNH040) (17 OCT 75)

			M + O		* M D				5 M 5 G		
	5.000 5.000 600		CBL000 51		CBL 00094 00073 00071		CBL 00098 00082 00096		CBL 00117 00083 00077		CBL 00138 00117 00096
DATA	STAB ELEVON MACH		CYN . 00132 . 00120 . 00117		CYN . 00124 . 00118 . 00111		CYN .00139 .00127 .00113		. 00124 . 00124 . 00113		.00120 .00118 .00102
PARAME TR1C	00000 00000 		CY .00381 .00381 .00409		CY .00411 .00359 .00359		CY .00474 .00394 .00375		CY .00355 .00333 .00304		CY .00338 .00371 .00284
	BETA = RUDDER = 10R9 = 0Y	1 5.00	. 01029 . 01648 . 02393 . 00000	00.5	CLM .00698 .01303 .02095	7 5.00	.00566 .01244 .02025	/ 5.00	CLM .00327 .01102 .01936	/ 5.00	. 000091 . 00916 . 01713
		VAL = -5.00	.06261 .06750 .07554 .00000	VAL = -5.00/	CD .06332 .06848 .07652	VAL = -5.00/	CD . 06365 . 06899 . 07726	VAL = -5.007	.06428 .06428 .06991 .07868	/AL = -5.00	CD .06592 .07235 .08213
		GRADIENT INTERVAL	CL . 19530 . 25363 . 31964 . 00000	GRADIENT INTERVAL	CL .20017 .31376	GRADIENT INTERVAL	CL .20124 .31865 .00000	GRADIENT INTERVAL	CL . 19642 . 32640 . 00000	SRADIENT INTERVAL	CL .19764 .34062 .00000
		3.33 GRA	. 01407 03599 01604 00000	3.32 GRA	DY .08346 00542 02533	3.32 GRA	008607 .00618 .00618	3.32 GRA	05888 05011 06713	3.33 GRA	DY .06133 .03333 .04051
	0000 IN. X0	RN/L =	03.191 03.191 05.186 05.186	PN/L ≈	DX 06427 05303 06491	RN/L =	DX 10009 05271 09386	# T/NG		RN/L =	00000
	1109.0	0 /0	ALPHAC .00000 P.00000	0 / 0	ALPHAC .00000 4.00000 4.00000	0 /0	ALPHAC .000000 .000000 .000000	0 /6	APH COCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCO	0 /0	ALPHAC .00000 2.00000 4.00000
E DATA	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	RUN NO.	MACH .58585 .58731 .58671	RUN NO.	MACH .58538 .58728 .58751 .00000	RUN NO.	MACH .58556 .58679 .58753	PCN NO.	MACH .59574 .58678 .58737 .00000	RUN NO.	MACH . 58568 . 58780 . 53718
REFERENCE DAT	2690.0000 SQ.F 474.8100 IN. 936.6800 IN.		AL PHAO 4.000 6.000 8.000 GRADIENT		AL PHAO 4.030 6.000 8.000 GRADIENT		ALPHAO 4.000 6.000 8.000 GRADIENT		ALPHAO 4.000 5.000 8.000 GRADIENT		ALPHAO 4.000 5.000 8.000 GRADIENT
	SREF LREF BREF SCALE		02 3.500 3.500 3.500		02 7.500 7.500 7.500		DZ 10.000 10.000		DZ 15.000 15.000		30.000 30.000 30.000

መ ተ ተ	157		8.000 .000 .000 .000		CBL 00126 00103 00104		CBL 00119 00092 00102	r 75)		5.000 5.000 .000 .600		CBL 00131 00094 .00000		CBL 00103 00074 00000
PAGE	(17 007	DATA	STAB # ELEVON # DX # MACH *		. 00017 . 00017 . 00098 . 00000		CYN .00113 .00099 .00095	(17 OGT	DATA	STAB = ELEVON = DX # MACH #		.00036 .00019 .00000		.00043 .00087 00087
	(DHOHOZ)	PARAMETRIC [0000		CY .00308 .00294 .00290		. 00273 . 00248 . 00288	(ZNHX10	PARAME TRIC	000.		. 00000 . 00498 . 00000		. 00387 .00512 .00510
		a	BETA ROUDDER I IORB	1/ 5.00	00007 00771 .01633	00/ 5.00	00040 00040 01519 01615			BETA = RUDDER = 10RB = DY	0/ 5.00	CLM .02806 .03351 .00000	00/ 5.00	CLM .02639 .03155
	ITER DATA			AL = -5.00/	CD .06699 .07392 .08464	L = -5.	. 06727 . 07444 . 08546 . 00000	BITER DATA)			VAL = -5.00	. 10095 . 12518 . 00000	RVAL = -5.0	. 10188 . 12784 . 00000
	1 0251 (08BITE			GRADIENT INTERVAL	CL .19848 .7535 .35505	GRADIENT INTERVA	.19802 .27643 .36162	11 0251 (ORB			GRADIENT INTERVAL	CL .46515 .53909 .00200	GRADIENT INTER	CL .46971 .54571 .00332
æ	11 747/1 ATI			3.33 GRAD	.000000	3.32 GRA	07 -07140 -08507 -05982 -00000	747/1 A			3.34 GRA	70 .69102 .65567 .00000	3.34 CR/	DY . 10196 . 12026 . 00000
DATA - CA23B	14-120(CA23B		0000 IN. X0 0000 IN. Y0 0000 IN. Z0	RN/L	03619 - 12600 - 16483	FN/L =	DX 11:91 22841 18856 00000	14-120(CA23B)		.0000 IN. X0 .0000 IN. Y0 .0000 IN. Z0	RN/L =	00000.	RN/L =	xa 00000. 00000.
TED SOURCE	ARC		1109.00 30. **	0 %	ALPHAC .00000 2.00000 4.00000	0 / 0	48888	ARC		1109	0 /0 .	ALPHAC 2.00000 4.00000	0 / 0	ALPHAC 2.00000 4.00000
TABULATED		DATA	SWED CHANGE	PUN NO.	MACH . 59595 . 58757 . 58594 . 00000	PUN NO.	74 50 50 50 50 50 50 50 50 50 50 50 50 50		7 DATA		S S S	7	ON NO	Mr. C.
R 75		REFERENCE DATA	2690,0000 SQ.F 474,3100 lv. 938,6800 lv.		ALPHAO 4.000 6.000 8.000 GRADIENT		AL PHAO 4.000 6.000 8.000 GRADIENT			2690.0000 SO.F' 474.8100 IN. 935.6806 IN.		ALPHAO 16.000 12.000 6RAD1ENT		AL PHAO 19.000 12.000 6RAD 1ENT
DATE OF MAR)		SREF = 2 LREF = 2 BREF = SCALE =		02 44,000 45,000		50.000 50.000 50.000			SREF LREF BREF SCALE #		02 3.500 3.500		02 7.500 7.500

ARC 14-120(CA238) 747/1 ATI 02SI (ORBITER DATA)

(ZNHX10) (17 OCT 75)

75)		ສ. ອ. 000 . 000 . 600		CBL 00074 00049		CBL 00104 00087 .00000		CBL 00104 00073		CBL 00078 00086 .00000		CBL 00086 00074 .00000
0) (17 OCT	DATA	STAB ELEVON # OX MACH *		CYN .00054 00032		CYN .00034 00037		CYN . 00016 . 000044 . 00000		CYN .00019 00036		CYN .00020 00037
(DIXHNZ)	PARAMETR I C	000 000 000 000 000		. 00393 . 00531 . 00531		CY .00319 .00487		CY .00309 .00398		CY .00348 .00381 .00050		CY .00349 .00393
		BETA = RUDDER = 10RB = DY	0/ 5.00	CLM .02517 .03017	0/ 5.00	CLM .02375 .02850	0/ 5.00	CLM .02149 .02571	5.00	CLM .02015 .02371	7 5.00	CLM .01930 .02313
לאואט אפווסאטי			VAL = -5.00/	CD .10252 .12980 .00003	/AL = -5.00/	.10331 .13148 .00000	/AL = -5.00/	CD .10651 .13663 .00000	/AL * -5.00/	CD . 10836 . 13985	'AL = -5.00/	CD .10811 .14069
			GRADIENT INTERVAL	CL .47085 .55067 .00000	GRADIENT INTERVAL	CL .47128 .55523 .00000	GRADIENT INTERVAL	CL .4825 5 .57398 .00000	GRADIENT INTERVAL	CL . 49079 . 58572 . 00000	GRADIENT INTERVAL	CL .48694 .58912 .00000
			3.33 GRA[DY -,40753 -,29938 .00000	3.35 GRAD	DY 37898 4:522 .00000.	3.35 GRAD	DY 47262 47328 00000	3.35 GRAD	0X -,43160 -,43160	3.35 GRAD	DY 48407 53399 .00000.
		00000 IN. YO 00000 IN. YO 00000 IN. ZO	RN/L =	00000 .	RN/L =	00000 .	RN/L =	000000.	RN/L =	000000 0000000	BN/L =	xa 00000 00000
		# 1109. # 375.	0 /0	ALPHAC 2.00000 4.00000	0 /0	AL PHAC 2.00300 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.000000	0 /0	ALPHAC 2.00000 4.00000
	SE DATA	SQ.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	. 59778 . 59813 . 00000	RUN NO.	MACH .59647 .59743 .00000	FICN NO.	MACH .59550 .59596 .00000	RUN NO.	MACH .5963 2 .59524 .00000	RUN NO.	MACH .59473 .59448 .00000
1	PEPERENCE DATA	259000000000000000000000000000000000000		ALPHAO 10.000 12.000		AL PHAO 10.000 12.000 6RAD!ENT		ALPHAO 10.000 12.000 6RAD : ENT		ALPHAO 10.000 10.000 0040.EN		ALPHAO 10.000 12.000 GRADIENT
		SREF SREF SCALE		02 10.000 10.000		02 15.000 15.000		05 30.000 30.000		05 45.000 45.000		50.000 50.000 50.000

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ro ₁	15 1		000.00 0000.00 0000.00		CBL 00047 00047 .00000		CBL 00060 00058 .00000		CBL 00070 00072		CBL 00073 00085		CBL 00097 00097 .00000		CBL 00087 00080 .00000
PAGE	(17 OCT	DATA	STAB ELEVON 3 DX MACH #		CYN . 00104 . 000080		CYN .00103 .00077 .00000		CYN .00094 .00072		CYN .00091 .00063		CYN .00084 .00000		000000 0000000 00000000000000000000000
	(ZNHX13)	PARAMETRIC D	.000. .000. .000. .000.		CY 000299 00000.		CY 64500. 64500.		CY .00192 .00252 .00000		. 00191 . 00229 . 00000		CY .00187 .00299		CY .00152 .00213
		à	BETA BRUDDER BRUDDER BRUDDER BRUDDER BRUDDER BRUDDY BRUDY BRUDY BRUDDY B	5.00	CLM .02502 .03215 .00000	5.00	.02239 .02926 .02926	2.00	. 02177 . 02847 . 02847	5.00	. 02009 . 02684 . 00000	2.00	CLM .01840 .02453 .00000	00.5 /(CLM .01709 .02281 .00000
	TER DATA)		∞ ~ ∙ • •	יר5.00/	. 08031 . 09464 . 00000	ال5.00/	00000°. 000594 00000°.	AL = -5.00	CD . 08081 . 09635	AL = -5.00/	CD . 08215 . 09789 . 00000	AL = -5.00/	. 00000	/AL = -5.00	00000. \$0401.
	O251 (ORBITER			ENT INTERVAL	CL .35181 .41338 .00300	IENT INTERVAL	CL .35263 .42017 .00000	GRADIENT INTERVAL	CL .35382 .42216	GRADIENT INTERVA	ر35/367 . 35/367 . و35/367	GRADIENT INTERVAL	CL .36544 .44346 .00000.	GRADIENT INTERVAL	. 26940 . 45356 . 00000
	747/1 ATI			3.34 GRADIENT	DY - 40468 - 50809 - 00000	.34 GRADIENT	747674 -,49008 -,00003	3.33 GRAD	7. 55984 58322	3.35 GRAD	5.00000 -, 48587 -, 5.003	3.35 GRAD	07 -,52819 -,50028	3.35 GAA	70 89053 84159
DATA - CA239	-12010		00 IN. XO	RN/L = 3	x0 00000 . 00000 .	RN/L # 3	XQ 00000 00000	RN/L =	×0 00000 00000	RN/L	x0 00000: 00000:	P11/1 =	00000 00000 XQ	RN/L =	x0 00000. 00000.
TABLE ATED SOURCE	ARC 14		1109.000 000 375.000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	AL PHAC 2.00000 4.00000	0 /0	ALFHAC 2.00000 4.00000	0 %	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000
TARIIA		DATA		RUN NO.	MACH . 59463 . 59358	RUN NO.	MACH .59270 .59228	FCA NO.	MACH .59175 .59204	RUN NO.	масн .59106 .59101 .00000	RUN NO	MACH .59039 .59057	PUR NO	MACH . 59084 . 59105
, 2		BEFF	30.000 SO.F 74.8130 IN. 25.6830 IN.		ALPHAO 8.000 10.000 5=ADIENT		ALPHAO 8.000 10.000 GRADIENT		ALPHAO B.COO 10.COO CPADIENT		ALPHAO 8.000 10.000 6RAD:ENT		ALPHAO 8,000 19,000 GRADIENT		ALPHAO 8,000 19,600 0920;ENT
# # # # # # # # # # # # # # # # # # #	ũ		SREF # 26, LREF # 4, JREF # 9,		3.500 3.500 3.500		02 7.500 7.500		02 10.000 10.000		02 15.000 15.000		0Z 30.000 30.000		02 45.000 45.000

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ARC 14-120(CA238) 747/1 AT1 0251 (ORBITER DATA)

1 22 13		8.000. .000. .000.		CBL 00067 00057	175)		5.000 5.000 10.000		CBL 00022 00040 .00000		CBL 00050 00053		CBL 00063 00057		CBL 00050 00069
3) (17 OCT	DATA	STAB ELEVON BOX		00000 00003 00003	4) (17 OC)	DATA	STAB ELEVON BOX MACH B		CYN .00118 .00093		CYN .00111 .00085		CYN .00098 .00080		CYN .00104 .00005
(ZNHX13	PARAME TRIC	. 000 . 000 . 000 . 000		CY .00136 .00217 .00000	+1XHNZ)	PARAME TRIC	0000.9		CY .00208 .00195		CY .00205 .00207		CY .00100 .00148		. 00000
		861A RUCDER 11 1098 11	00/ 5.00	CLM . n.1631 . 02208 . 00000			BETA = RUDDER = 1CRB = DY	00/ 5.00	CLM .02167 .02712	0/ 5.00	CLM .01978 .02449 .02000	0/ 5.00	CLM .01852 .02358	3/ 5.00	CLM .01731 .02245
(ORBITER DATA)			•	CD . 0864? . 10552	ORBITER DATA)			• .5	00 00 00 00 00 00 00 00 00 00 00 00 00	VAL = -5.00	CD .08078 .09590	/AL = -5.00	00000° 94960° 94960°	/AL = -5.00/	CD . 08218 . 09835 . 00000
AT1 0251 (OF			GRADIENT INTERVAL	CL .37026 .45859 .00000	AT1 0251 (OR			GRADIENT INTERVAL	CL . 34991 . 40591 . 90000	GRADIENT 'NTERVAL	CL .35480 .41642 .00000	GRADIENT INTERVAL	CL .35415 .41762 .00000	GRADIENT INTERVAL	CL .35E46 .42E07 .00000
1/242 (3.35 GRA	DY 51807 55625 .00000	1/247			3.34 GRA	07 60672 62422 .00000	3.34 GRA	57802 57805 57676	3.33 GRAI	07 65106 62205	3.35 GRA	DY 55318 65905 .00000
14-120(CA238		.0000 IN. XO .0000 IN. YO .0000 IN. ZO	RN/L =	00000 . 00000 .	14-120(CA23B)		2000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L *	000000 10.00000 10.00000	= 1/86	00000 10.00000 10.00000	RN/L .	00000 10.00000 10.00000	RN/L	00000 10.00000 .000000
ARC		1109 375	0 /0 .	ALPHAC 2.00000 4.00000	ARC		1109.00 . 00 . 375.00	0 /0	ALPHAC 000000 1.000000	0 /0	00000 00000 00000	0 /0	8 8 9 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	0 /0	ALPHAC 2.00000 4.00000
	CE DATA	. F T	RUN NO	MACH .59149 .59137 .00000		E DATA	. F1. ХМВР . УМВР . ИМВР	RUN NO	MACH .58921 .58310 .00000	RUN NO	39102 59102 59033	RUN NO.	МАСН . 58959 . 58965 . 00000	PUN NO.	масн . 58831 . 58836 . 00000
	PEFERENCE DATA	2690.0000 SQ. 474.8100 IN. 936.6800 IN.		ALPHAO 8.030 10.033 GRADIENT		REFERENCE	690.0000 SO 474.8100 IN 936.6800 IN		ALPHAO 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT		ALPHAO B.00v 10.000 GRADIENT
		SCALE # C		50.000 50.000 50.000			SREF = 2 LREF = 3 3REF = 3 SCALE = 3		02 3.500 3.500		02 7.500 7.500		02 10.000 10.000		02 15.000 15.000

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453	75)		5.000 5.000 10.000 .600		CBL -,00083 -,00095 -,00000		CBL 00070 00077		CBL 00058 00061	1 75 1		5.000 10.000 .600		CBL 00057 .00004		CBL -,00055 -,00021 .00000
PAGE	17 001	DATA	STAB # ELEVON # DX # MACH #		CYN . 00095 . 00057		. 00105 . 000048 . 00000		CYN . 00074 . 000048	1 (17 00	DATA	STAB # ELEYON # DX # MACH #		CYN .00085 .00026		. 00000
	(ZNHX 14)	ARAMETR IC	0000.9		.00117 .00146 .00000		.00000		. 00000 . 00008 . 00000	(2NHX 15	PARAME TRIC	0000.6		CY .00167 .00448		CY . 00250 . 00452 . 00000
		Q	BETA * RUDDER * 10R9 * DY	5.00	. 01510 . 02142 . 00000	/ 5.00	CLM .01521 .02653	1/ 5.00	CLM .01545 .02536 .00000			BETA = RUDDER = 10089 = 1008	0/ 5.00	CLM . 02438 . 06000	0/ 5.00	CLM .02373 .07835 .00000
	TER DATA)			יר = -5,000	08429 .08429 .10198	AL = -5.00,	.08531 .00531 .00000	AL = -5.00	. 08602 . 10491 . 00000	(ORBITER DATA)			/AL * -5.00	CD .09745 .12159 .00000	VAL = -5.00.	CD . 10012 . 12476 . 00000
	0251 (ORBITER			ENT INTERVAL	CL .36731 .44515 .00000	ENT INTERV	CL .36993 .45985 .00000	IENT INTERVAL	CL .37487 .45962 .00000	1520			GRADIENT INTERVAL	CL .45294 .52051 .00000	GRADIENT INTERVA	CL .46011 .53240 .00000
œ	747/1 AT1			.35 GRADIENT	74427 54427 65315	.35 GRAD16	07 58631 62227 .00000	3.35 GRADIENT	7745 57745 62433 .00000	3) 747/1 AT1			3.34 GRAD	0 59402 65242 . 00000	3.34 GRA	07 -,65 536 -,65 825 .0000
DATA - CA236	1130(CA23B		1000 IN. X0	RN/L = 3	000000. 000000.01	RN/L = 3	0X 10.30600 10.60600.	RN/L = 3	000000. 000000. 000000.	14-1201CA23B		0000 1N. X0	= 7/Nd	X0 000000 000000 000000	FN//	0000 0000 0000 0000
FD SOURCE	ARC		# 1109.00 # 375.00	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 / 0	ALPHAC 2.00000 4.00000	ARC		= 1109. = 375.	0 /0	ALPHAC 2.00000 4.00000	0 /0 .	ALPHAC 2.00000 4.00000
TARULATED		DATA	T. XMAP YMAP ZMAP	RUN NO.	MACH . 58818 . 59074 . 00000	RUN NO.	MACH .59228 .59176 .00000	FOX NO.	MACH .59041 .59056 .00000		E DATA	71. XX.00 XX.00 XX.00 XX.00 XX.00	RUN NO	MACH .59219 .58993 .00000	ON NO	MACH .59002 .58944 .00000
97. 92.		REFERENCE DAT	2690.0000 SQ.F 474.8100 IN. 936.6800 IN.		AL PHAO 8.000 10.000 GRAD1ENT		AL PHAO 8.000 10.000 GRAD1ENT		AL PHAO B.000 10.000 GRADIENI		REFERENCE	2690.0000 50.F 474.8100 IN. 935.6800 IN.		AL PHAO 10.000 12.000 GRAD I ENT		AL PHAO 10.000 12.000 GRADIENT
E C STAC			SREF = S		30.000 30.000		DZ 45.000 45.000		50.000 50.000			S AREST		02 3.500 3.500		02 7.500 7.500

# 10 #	1 75)		5.000 5.000 10.000		CBL 00055 00045		CBL 00077 00033		CBL 00078 00034		CBL 00093 00046		CBL 00069 00026
PAGE	(17 00	DATA	STAB FELEVON FOX MACH		CYN .00073 .00004		CYN .00055 00002		CYN .00043 00023		CYN .00024 00016		CYN .00027 00033
	(21XHX15)	PARAMETO;C	0000.8		CY .00310 .00466		CY .00269 .00419		CY .00297 .00430		CY .00237 .00012		CY .00260 .00350 .00000
			BETA # RUDDER # 10RB # DY	5.00	CLM .02318 .02753 .00000	5.00	CLM .02199 .02511	5.03	CLM . 02949 . 02468 . 00000	5.00	CLM .01937 .02284 .00000	5.00	CLM , 01921 , 02257 , 00000
	OZSI (ORBITER DATA)		m c ~ 0	/AL = -5.00/	.10181 .12690 .00000	/AL = -5.00/	. 10294 . 12972 . 00000	/AL * -5.00/	CD .10668 .13578	/AL = -5.00/	.10727 .13867 .00000	/AL = -5.00/	. 10805 . 13971 . 00000
	AT1 0251 (ORE			GRADIENT INTERVAL	CL .46512 .54071 .00000	GRADIENT INTERVAL	CL .46843 .55090 .00000	GRADIENT INTERVAL	CL .48374 .57239	GRADIENT INTERVAL	CL .48493 .56316 .00000	GRADIENT INTERVAL	CL .48903 .58875 .00000
38	747/1			3.33 GRA	07 69918 64470	3.35 GRA		3.35 GRA	DY 59283 65031	3.35 GRA	07 70121 59625	3.35 GRA	DY -,71338 -,67087 .00000
E DATA - CA238	14-120(CA23B)		00000 LN. X0 000000 LN. X0 00000 LN. X0 00000 LN. X0 00000 LN. X0 00000 LN. X0 00000 LN. X0 00000 LN. X0 000000 LN. X0 00000 LN. X0 00000 LN. X0 00000 LN. X0 00000 LN. X0 0	# 7/14B	000000.01	RN/1	000000 10.000000 00.00000	RN/L =	0X 0000001 00000001	RN/L =	00000 101 000000 101 000000 101	R:17L =	0X 00.00.01 00.00000
TED SOURCE	APC		375.6	0 /0	ALPHAC 2.00000 4.000000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000 .00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00300 4.00000 .00000
TABULATED		DATA	XMRP XMRP ZMRP	RUN NO.	MACH .58891 .58894 .00000	RUN NO.	MACH .58823 .56938	FOR NO.	MACH .58315 .59073	RUN NO.	MACH .58995 .58956	PUN NO.	MACH .58887 .58933 .00000
MAR 76		REFERENCE DATA	2690.0000 SO.F. 474.8100 IN. 936.6800 IN.		ALPHAO 10.000 12.000 GRADIENT		ALPHAO 10.000 12.000 GRADIENT		ALPHAO 10.000 12.000 GRADIENT		ALPHAO 10.000 12.000 OPADIENT		ALPHAO 10.000 12.000 GRADIENT
3A15 23 M					000.001		02 15.000 15.000		52 30.000 30.000		02 45.000 45.000		50.000 50.000 50.000

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OF POOR QUALITY

455	15 1		5.000 5.000 .600		CBL 00046 00053 .00000		CBL 00065 00076		CBL 00071 00080		CBL 00078 00099		CBL 00113 00095		CBL 00089 00104 .00000
PAGE	(17 OCT	DATA	STAB = ELEVON = DX HACH =	•	. 00112 . 00091 . 00000		.00122 .00036 .00000		CYN .00108 .00083		CYN .00106 .00072		CYN .00097 .00065		CYN .00090 .00052
	(2NHX16)	PARAMETRIC D			CY .00291 .00335		. 00334 . 00366 . 00000		CY .00272 .00338		CY .00279 .00346		. 00000 . 00288 . 00000		CY .00211 .00299
		ο.	BETA ** RUDDER ** 10RB ** DY **	5.00	CLM .01 598 .02124 .00000	5.00	CLM .01448 .01862 .00000	2.00	CLM .01372 .01794 .00000	00.5 /	CLM .01339 .01780	1/ 5.00	CLM .01349 .01817	97 5.00	CLM .01364 .01850 .00000
	TER DATA)		∞ α-0	\L = -5.00/	CD .09739 .00003	AL = -5.00/	00000°. 09809 00000°.	AL = -5.00,	. 08296 . 09845 . 00000	AL = -5.00	CD . 08323 . 09923 . 00000	/AL = -5.00/	CD . 08464 . 10245 . 00000	/AL = -5.00	CD .08575 .10466
	O2SI (ORBITER			ENT INTERVAL	CL .34968 .40712 .00300	ENT INTERVAL	CL .35427 .41535 .00000	GRADIENT INTERVAL	CL .35410 .41651 .00000	IENT INTERV	CL .35879 .42530	GRADIENT INTERVA	CL .36767 .44313 .00000	GRADIENT INTERV	CL .37231 .45662 .00000
m	747/1 ATI			.34 GRADIENT		3.34 GRADIENT	7.81185 81231 00000	3.33 GRAD	DY 76413 80148 .00000	3.35 GRADI	07 84082 75321 30000	3.35 GRAE	PY 80629 85063	3.35 CRAI	2Y 75331 7027 0000
DATA - CA238	0		0000 IN. YO 0000 IN. YO 0000 IN. ZO	5 = 7/Nd	0X 20.0000 20.00000.	RN/L = 3	50.0000 00000 000000.	RN/L =	20.00000 20.00000 20.00000	# 7/NG	PX 20.00000 50.000000	RN/L =	20.000.05 000000.05	Ett.	200000 . GS 000000 . GS 000000 .
D SOURCE	ARC		1109.00 .00. 375.00	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000
TABIRATED		DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH .58974 .59003	SCN NO.	=00	FICH NO.	MACH .59013 .58931	RUN NO.	MACH .58937 .58930 .00000	RUN NO.	MACH . 59004 . 59027	RUN NO.	MACH .58948 .58970
r u		REFERENCE DAT	2690.0000 SO.F. 474.8100 IN. 935.6800 IN.		AL PHAO 8.000 10.000 GRADIENT		AL PHAO 8.000 10.000 GRADIENT		ALPHA0 8.000 10.000 GRADIENT		ALPHA0 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT
0 M	C		3.20 M M M M M M M M M M M M M M M M M M M	1	02 3.500 3.500		02 7.500 7.500		02 10.000 10.000		02 :5.000 :5.000		02 30.000 30.000		02 45.000 45.000

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5.000 5.000 20.000 PASE 456 (17 001 75 STAB TELEVON TO DX MACH PARAMETRIC DATA (ZNHX16) .000 .000 6.000 BETA # RUDDER = 10RB = DY = ARC 14-120(CA238) 747/1 ATI 0251 (ORBITER DATA) # 1109.0000 IN. XO * 00000 IN. YO * 375.0000 IN. ZO PEFERENCE DATA 2690.0000 SO.FT. 474.8100 IN. 936.6800 IN.

ARC 14: 120(C423B) 747/1 AT1 02S1 (ORBITER DATA)

CBL -.00085 -.00096

CYN .00094 .00000.

CY .00212 .00307 .00000

CLM .01354 .01839 .00000

CD . 08622 . 10518 . 000000

CL .37213 .45747 .000000

. 80299 - 77864 - 00000

DX 20.00000 20.00000

ALPHAC 2.00000 4.00000

%ACH .59897 .58896 .00000

AL PHAO 8.000 10.000 6RADIENT

50.000 50.000 50.000

GRADIENT INTERVAL # -5.00/ 5.00

3.35

RN/L =

0

RCN NO.

(17 OCT 75

(ZNHX17)

	5.000 20.000 .600		CBL 00121 00015		CBL 00101 00042 .0000		CBL 00084 00062 .00000		CBL 00120 00075
DATA	STAB = ELEVON = DX = MACH =		CYN .00074 .00017		CYN .00070 .00002		CYN .00070 00010		CYN .00059 00015
PARAMETRIC	000. 8.000.		CY .00239 .00624		CY .00356 .00559		CY .00432 .00503		CY .00455 .00520 .00000
	BETA = RUDDER = 10RB = DY	0/ 5.00	CLM .02216 .02540 .00000	0/ 5.00	CLM .02093 .02494	0/ 5.00	CLM .01592 .02307	0/ 5.00	CLM .01893 .02194
		VAL = -5.00/	CD . 09892 . 12380 . 00000	VAL = -5.00/	CD . 10149 . 12550 . 00000	VAL = -5.00/	CD .10316 .12675	VAL = -5.00/	CD . 10350 . 12819 . 00000
		GRADIENT INTERVAL	CL .44996 .52070 .00000	GRADIENT INTERVAL	CL .45714 .52373 .00000	GRADIENT INTERVAL	Ct. .46244 .53488 .00000	GRADIENT INTERVAL	Cl. .46368 .54052 .00000
		3.34 GRAI	DY -,53583 -,91880 .00000	3.34 GRAI	. 71654 86406 . 00000	3.33 GRA	0Y 82520 81252	3.35 GRA	DY 83998 83206 .00000
	0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	DX 20.00000 20.00000	RN/L =	20.00000 20.000000 20.000000	RN/L =	DX 20.00000 20.00000	RN/L =	20.00000 20.00000 20.00000
	1109.0 1. 375.0	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000
E DATA	SQ.FI. XMRP	RUN NO.	340H . 58981 . 58935	PUN NO.	4. 6.000	RUN NO.	MACH . 59142 . 59107 . 00000	PUN NO.	MACH . 59121 . 55520 . 00000
REFERENCE DATA	2690.0000 SQ 474.8100 !N. 936.6800 IN.		AL PHAO 10.030 12.030 GPAD!ENT		AL PHAO 10.000 12.000 6PADIENT		ALPHAO 10.000 12.000 GRADIENT		AL PHAO 10.009 12.000 GRADIENT
	SREF = 21		02 3.500 3.500		02 7.500 7.500		D2 10.000 10.000		02 15.000 15.000

457	15 1		5.000 5.000 20.000		CBL 00103 00084 00000		CBL -, 00089 -, 00089		CBL 00089 00078	1 75)		5.000 .000 .000 .000		CBL 00254 00218		CBL -,00233 -,00223 -,00000
PAGE	(17 OCT	DATA	STAB # ELEVON # DX # MACH #		. 00053 - 00058 - 00000		.00018 .00018 .00003		CYN .00033 00029	1 (17 001	DATA	STAB # ELEVON # DX #ACH #		.00026 .00104 .00000		CYN 00007 00098
	(Z:XHNZ)	PARAMETRIC D	000.8		. 000433 . 00601 . 00000		. 000321 . 00084 . 00000		CY .00346 .00502	(ZNHXZ)	PARAMETR1C	0000. 0000. 0000.		CY .00883 .00000.		CY .00801 .00873
		ο.	BETA RUCDER ICRB BY IN IN	00.6	.01801 .02145 .02040	00.5 /	. 00000	0/ 5.00	#60000.			BETA # RUSDER # 1049 #	00/ 5.00	CLM .05366 .05978 .00000	00/ 2.00	90.000 90.000 90.000
	ITER DATA)			AL = -5.00	. 10600 . 13429 . 00000	AL = -5.00	CD .10690 .13792	-5.0	CD .10712 .13827 .00000	(CRBITER DATA)			.5	65480° 64480°	ii Š	00 26486 366600 36660 366000 366000 366000 366000 36600 3600
AT1 0251 (ORBITER				IENT INTERVAL	CL .47%66 .56562 .00000	GRADIENT INTERV	CL .48320 .57957 .00000	RADIENT INTERVAL	. 58066 . 00000	1320 :			GRADIENT INTERVAL	CL .38555 .45935 .00000.	GRADIENT INTERVAL	ci. .38557 .46376 .00000
m	747/1 AT			.35 CRADIENT	DY 87982 77306	.35	787957 - , 92857 - , 78745 - , 00000	3.35 GRAD	YO. 87139 08000.	B) 747/1 A1			3.31 GRA	DY .15855 .04730	3.30 GRA	07 .03435 .06000
DATA - CA23B	14-120(CA23B		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L = 3	DX 20.00000 20.00000 .00000	RN/L = 3	0x 20.00000 20.00000.	RN/L	000000 20,000000 20,000000	14-120 (CA23B)		0000 IN. X0 0000 IN. Y0 0000 IN. Z0	- 1. No	0.00000 .00000 .00000	PN/L •	\$000 0000 0000 0000 x
LJ			1109.00 	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	ARC		375.6	0 /0	ALPHAC 2.00000 4.00000	6	AL PHAC 8.00000 4.000000
TABULATED SOURCE		DATA	T. XMRP YMRP ZMRP	PUN NO.	MACH .59109 .59091	RUN NO.	MACH . 59145 . 59106 . 00000	FOS NO.	MACH . 59044 . 59121 . 00000		F DATA	FI. XMRP YMRP ZMRP	RUN NO.	масн . 58756 .58727 . 00000	PUN NO	MACH . USRDS . FSERR . COSDS
75		REFERENCE DAT	2690.0000 50.F 474.8100 IN. 936.6800 IN.		AL PHAO 10.000 12.000 GRADIENT		AL PHAO 10.000 12.000 GRADIENI		ALPHAO 10.000 12.000 GRADIENT		BEFFRENCE DAT	2690.0000 50.f 474.8100 1N. 936.6800 1N.		ALPHAO 10.000 12.000 GRADIENT		ALPHAO 10.000 12.000 GRADIENT
HAM FC STAC)		SREF = 26 SREF = 26 SCALE = 9		DZ 30.000 30.000		02 45.000 45.000		02 50.000 50.000			SREF # 6		02 3.500 3.500		52 7.500 7.500

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REFERENCE DATA

TABULATED SOURCE DATA - CA238

ARC 14-1201CA23E) 747/1 ATI 0351 (ORBITER DATA)

(ZNHX27) (17 OCT 75)

	5.000 000 000 600	ť	CBL 00205 00228		CBL 00251 00226		CBL -,00244 -,00230 -,00000		CBL 00269 00226		CBL 00260 00217
DATA	STAB ELEVON * DX MACH #		CYN 00025 00083		CYN 00072 00121		CYN 00064 00122		CYN 00064 00120		CYN 00063 00121
PARAMETRIC			CY .00705 .00887 .00300		CY .00817 .01042		. 00807 . 01002 . 00000		CY .00815 .00000.		. 00937 . 00937
	BETA RUDDER ICRB DY	/ 5.00	. 04895 . 05300 . 05300	7 5.00	.04771 .05158	5.00	CLM .04397 .04809	5.00	CLM .04337 .04628 .00000	5.00	CLM .04226 .04579 .00000
		VAL5.00/	CD . 06492 . 08647 . 00000	VAL = -5.00/	CD .06449 .08804	VAL = -5.00/	CD .06740 .09328 .00000	VAL = -5.00/	CD .06912 .09630	/AL = -5.00/	CD .06930 .09731
		GRADIENT INTERVAL	CL .38682 .46614 .00000	GRADIENT INTERVAL	CL .38624 .47158 .00000	GRADIENT INTERVAL	CL .39461 .49093 .00000	GRADIENT INTERVAL	CL .40181 .50385 .00000	CRADIENT INTERVAL	CL .40079 .50721 .00000
		3.30 GRAC	70 00000.	3.30 GRAD	70 04020 04079 02020	3.29 SAAD	05130 .05130 .05755 .00000	3.30 GPAD	.06827 00121 00000	3.30 GRAD	7. . 05736 . 07269 . 00000
	09.0000 IN. XO .CCOO IN. YO 75.0000 IN. ZO	RN/L =	x0 00000. 00000.	RN/L =	00000 · 00000 · 00000 · 000000 · 000000 · 000000	RN/L .	00000 · 000000 · 000000 · 000000 · 000000	RŇ/L ≉	00000 · 000000 ·	RN/L =	00000 00000 00000
	# 1109.0 .0 . 375.0	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.60000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000
E DATA	FT. XMRP YMRP ZMRP ZMRP	RUN NO.	MACH .58523 .56597 .00000	RUN NO.	MACH .58706 .58628 .00000	FON NO.	MACH . 58533 . 58575 . 00000	RUN NO.	MACH .58507 .58557 .00000	RUN NO.	MACH .58565 .58536 .00000
REFERENCE DAT	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN.		AL PHAO 10.000 12.000 GRADIENT		ALPHAO 10.000 12.000 GRADIENT		AL PHAO 10.000 12.000 GRADIENI		ALPHAO 10.000 12.000 5PAD:ENT		AL PHAO 10.309 12.300 6RADIENT
	SREF # SREF # SOCALE #		02 10.000 10.000		02 15.000 15.000		DZ 30.000 30.000		02 45.000 45.000		50.000 50.000

£28	(57)		5.000 .000 10.000 .600		CBL 00185 00226 .00000		CBL 00211 00244 .00000		CBL 00217 00240 .00000		CBL 00232 00255		CBL 00233 00263 .00000		CBL 00229 00225 .00000
PAGE	(17 OCT	DATA	STAB "ELEVON " DX MACH "		CYN .00020 .00008		. 00006 - 00006 - 00000		00008 00021 .00000		CYN 00007 00024 .00000		CYN 00021 00040		CYN 00034 000454 00004
	(2NHX28)	PARAMETRIC D	0000.9	•	CY .00827 .00831		.00000 .00000		. 00000		.00749 .00749 .0000		.00728 .00789 .00780		.00698 .00755 .00000
		a	BETA RUDDER RIORB R	2.00	03394 .03994 .04830	00.5 /	CLM .03625 .04462 .00000	0/ 5.00	003473 .03473 .054325 .00000	0/ 5.00	03309 03309 04133 00000	0/ 5.00	CLM .03226 .04158 .00300	0/ 5.00	CLM .03175 .04082
	(ORBITER DATA)			AL = -5.00.	CD . 04835 . 05921 . 00000	/AL = -5.00	00000 . 04834 . 00000	/AL = -5.00	00000°.	VAL = -5.00	CD . 04972 . 06153 . 00000	VAL = -5.0	CD .05152 .06536 .00000	VAL = -5.0	CD . 05296 . 06753 . 00000
	1 0351			GRADIENT INTERVAL	CL .27315 .32742 .00000	GRADIENT INTERVAL	CL -27979. -53752.	GRADIENT INTERVAL	CL .28259 .34052	GPADIENT INTERVA	CL .28610 .34435 .00000	GRADIENT INTERVA	CL .29191 .36548 .00000.	ADIENT INTERVAL	CL . 29410 . 37471 . 00000
œ	TA 1/747 (3.31 GRAD	. 00000	3.30 GRAD	70 . 02369 . 03378	3.30 GRAC	70 - 47893. - 66883.	3.30 GPA	¥1880. ₽388900000.	3.29 GPA	07 .05832 .05636	3.30 CPA	07 - 01492 - 07884 - 00000
DATA - CA238	14-120(CA238		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	00000°.	RN/L *	0X 10.00000 10.00000	RN/L =	000000 10.000000 10.000000	RN/L =	0x 10.00000 10.00000	R11/L =	00000 10.00000 10.00000	51/F	00000 .01
ED SOURCE	ARC		1109.00 2 .00	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	AL PHAC 2.00000 4.00000	0 /3	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000
TABULATED		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .58687 .58723 .00000	RUN NO.	MACH . 58766 . 58809 . 00000	FUN NO.	MACH . 58624 . 58556 . 00000	RCN NO.	MACH .58701 .58720	RUN NO.	MACH .58688 .59711	ON NUS	MACH .58645 .59643
3 76		PEFERENCE DAT	2690,0000 SO.F1 474,8100 IN. 936,6800 IN.		ALPHAD 8.000 10.000 GRADIENT		ALPHAD 8.000 10.000 0RADIENT		AL PHAO 8.000 10.000 6RADIENT		ALPHA0 8.303 10.003 095.000		ALPHAO 9.000 10.000 6840:5:11		AL PHAO 8,000 10,000 0940]ENT
LATE 23 MAR			SREF BREF BREF BREF BREF BREF BREF BREF B		02 3.500 3.500		DZ 7.500 7.500		02 10.000 10.000		02 15.000 15.000		02 30.000 30.000		02 45.000 45.000

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F +60	1 75)		5.000 .000 10.000		CBL0023800000	1 75)		5.000 .000 10.000		CBL 00235 00309		CBL 00221 00278		CBL 00214 00256 .00000		CBL 00227 00241 .00000
PAGE	.30 (11 00	DATA	STAB # ELEVON # DX MACH #		CYN 00027 00051	.30 (11 00.	DATA	STAB # ELEVON # DX # MACH #		CYN 00001 00031		CYN 00017 00058		CYN 00024 00075		CYN 00046 00103
	(ZNHX28)	PARAME TRIC	000.		CY .00708 .00752 .00000	(ZNHX29	PARAMETRIC	0000. 8		CY .00779 .00953		CY .00782 .00913		CY .00784 .00889 .00000		.00761 .00847 .00000
			BETA RUDDER 10RB EDY =	0/ 5.00	CLM .03197 .04104 .00000			BETA RUODER # TORB #	0/ 5.00	CLM .05095 .05506 .00000	00/ 5.00	CLM .04780 .05191	00/ 5.00	CLM . 04549 . 04961 . 00000	00/ 5.00	CLM .04342 .04743 .00000
	(ORBITER DATA)			'AL = -5.00/	CD .05338 .06826	(ORBITER DATA)			/AL = -5.00,	.06018 .08157 .00000	ıı Tü	CD .06290 .08351	L = -5.	CD . 06466 . 08492	ıı R	CD .06547 .08622 .00000
	0351			GRADIENT INTERVAL	CL . 29927 . 38144 . 00000	0351			GRADIENT INTERVAL	CL .36973 .44062 .00000	GRADIENT INTERVAL	CL .37631 .44957 .00000	GRADIENT INTERVA	CL .38109 .45539 .00000	GRADIENT INTERVAL	ci. .38557 .46210 .00000
	747/1 AT1			3.30 GRAD	70 .05297 .00953	1747/1 AT!			.31	07085 .00873 .00000	. 30	03020 .03353 .03353	30	07 01491 .04742 .00000	3.30 GRAD	09362 .09362 .06535
DATA - CA238	14-120(CA23B)		0000 IN. YO	RN/L = 3	00000 10.00000 10.00000	14-120(CA23B		00000 IN. YO	RN/L = 3	000000. 000000. 000000.	RN/L = 3	DX 10.00000 10.00000	RN/L = 3	DX 10.00000 10.00000	RN/L = 3	00000 00000 00000 00000
TED SOURCE	D _B A		1109.0 0.0 10.0 10.0	0 /0	ALPHAC 2.00000 4.00000	ARC		1109.0	0 /0	ALPHAC 2.00000 4.00000	0 /0	A: 000000.	0 /0	U000 4000 1000 1000 1000	0 /0	A. 00000 00000 000000
TABULA	TABULATED		T. XMRP YMRP ZMRP	RUN NO.	MACH .58533 .58689 .00000		: DATA	XMRP YMRP GRRY	PUN NO.	MACH . 58965 . 58806 . 00000	RUM NO.	. 58849 . 58849 . 00000	RUN NO.	MACH .58770 .58827 .00003	RUN NO.	7401 10000 10000 10000
MAR 76		REFERENCE DATA	2690.0000 SQ.F. 474.8100 IN. 936.5800 IN.		AL PHAO B.000 10.000 GRADIENT		REFERENCE	2690,0000 SQ.FT 474.8100 IN. 936.5800 IN.		AL PHAO 10.000 12.000 GRADIENT		ALPHAO 19.000 12.000 GRADIENT		ALPHAO 10.000 12.000 GRADIENT		AL PHAO : 0.000 12.000 GRADIENT
DATE 23 M			SAEF SAEF SCALE #		50.000 50.000 50.000			LAREF PREF SCALE		3.500 3.500		DZ 7.500 7.500		DZ 10.000 10.000		02 15.000 15.000

461	. 27		5.000 10.000 .600		CBL 00242 00223 .00000		CBL 00257 00211		CBL 00213 00211	1 75)		5.000 .000 20.000 .600		CBL 00221 00218		CBL 00223 00245 .00000
PAGE	(17 001	DATA	STAB # ELEVON # DX # MACH #		CYN -,00058 -,00122		CYN 00059 00118		CYN 0004 00007 .00000) (17 OCT	DATA	STAB # ELEVON # DX # MACH #		. 00028 00017		CYN . 00008 00035
	(ZNHX29)	PARAMETRIC C	0000.8		CY .00755 .00927 .00000		. 00760 . 00907 . 00000		CY . 00752 . 00896 . 0000	(2NHX30)	PARAME TRIC	000°.		. 00000 . 00000		. 00762 . 00808 . 00000
		u.	BETA = RUDDER = 10RB = DY	/ 5.00	CLM . 04206 . 04505	2.00	CLM . 04156 . 04440 . 00000	00.5 /	CLM .04125 .04416 .00000			BETA # RUDDER = 10RB # DY #	00/ 2.00	00000°	0/ 5.00	CLM . 04254 . 04545 . 00000
	ITER DATA)			AL = -5.00/	00 .06782 .09283 .00000	AL = -5.00	.00000 .09651 .00000	AL = -5.00	00000°.	(ORBITER DATA)			AL = -5.	.06168 .08135 .00000	VAL = -5.00	.05374 .08291 .00000
	03S1 CORBITE			IENT INTERVAL	CL .39664 .48717 .00000	GRADIENT INTERVAL	CL .40006 .50055	GRADIENT INTERVAL	CL ,40242 ,50328 ,00000	0351			GRADIENT INTERV	CL ,36934 ,43558 ,00000	GRADIENT INTERVA	CL .37643 .44438 .00000
	747/1 AT1			.29 GRADIENT	05480 .05027 .05030.	.30	DY .06013 .11899 .00000	. 30	.05102 .07609 .00000	11 747 / 1 ATI			3.31 GRA[00000.	3.30 GRA	03582 .03591 .03591
DATA - CA23B	14-120(CA23B)		1000 IN. X0 1000 IN. Y0 1000 IN. Z0	RN/L = 3	000000 10.000000 10.00000	RN/L = 3	0X 10.00000 10.00000	RN/L = 3	00000 . 10.00000 . 10.00000 .	14-120(CA23B)		0000 IN. X0 0000 IN. Y0 0000 IN. Z0	RN/L	00000°	RN/L ±	0x 20.00000 20.00000
SOURCE	ARC		1109.00 . 30 . 375.00	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	ARC		. 109.0 375.	0 / 0	ALPHAC 2.00000 4.000000	0 /0	ALPHAC 2.00000 4.000000
TABULATED		DATA	7. X X X X X X X X X X X X X X X X X X X	RUN NO.	MACH .58839 .00000	PUN NO.	MACH . 58880 . 00000	RUN NO.	# A ACh :59587 :00002		E DATA	-	RUTA NO	0 10 0 00 0 00 0 00 0 00 0 00 0 00 0 00	O7	0000 1000 1000 1000 1000 1000 1000 100
7. 76		REFERENCE	2690,0000 SO.FT 474.8100 IN. 936.6800 IN.		ALPHAD 10.000 12.000 GRADIENT		AL PHAO 10.000 12.000 GRADIENT		ALPHAO 10.000 12.000 GRADIENT		REFERENCE	2690.0000 50.F 474.8100 1N. 936.6900 IN.		ALPHAO 10.000 12.000 GRAD1E:11		AL PHAD 10.000 12.000 GRAD1ENT
DATE 23 MAR	;		9ACF = 2 LAEF = 2 SCALE =		02 30.000 30.000		02 45.000		02 50.000 50.000			SREF ** DREF ** SCALE **		02 3.500 3.500		02 7.500 7.500

ARC 14-120(CA238) 747/1 ATI 03SI (ORBITER DATA)

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(17 OCT 75

(ZNHX30)

CBL -.00230 -.00271 .00000 CBL -.00217 -.00276 CBL -.00238 -.00219 CBL -.00237 -.00227 .00000 CBL -.00236 -.00220 5.000 .000 20.000 CYN -.00006 -.00052 CYN -.00014 -.00057 CYN -.000040 -.000098 CYN -.00064 -.00109 CYN .00047 .00111 STAB ELEVON DX MACH PARAMETRIC DATA CY .00771 .00802 .00000 CY .00745 .00808 .00000 CY .00737 .00862 .00000 . 00000 . 00867 . 00000 .000 .000 .000 .000 .00035 .00883 CLM .04089 .04439 .004439 CLM .03918 .04337 .00000 CLM .03954 .04257 .00000 CLM .04036 .04303 .04303 CLM .04051 .04300 .00000 5.00 BETA RUDDER 10RB DY 5.00 5.00 5.00 5.00 -5.00/ GRADIENT INTERVAL = -5.00/ -5.00/ GRADIENT INTERVAL = -5.00/ = -5.00/ CD .06522 .08404 .00000 CD .06533 .08533 .00000 CD .06801 .09179 cb .06927 .09388 .00000 CD .06955 .09626 .00000 GRADIENT INTERVAL GRADIENT INTERVAL GRADIENT INTERVAL CL .38247 .45686 .00000 CL .38214 .45718 .00000 CL .39200 .48377 .00000 CL .40161 .49626 .00000 CL .4003: .50275 .00000 05242 DY .03261 .02195 .00000 DY .04541 .08552 .00000 . 06524 . 09032 . 00000 -.00144 .06742 3.30 3.29 3.30 3.30 222 DX 20.00000 20.00000 0x 20.00000 20.00000 20.00000 20.00000 20.00000 DX 20.00000 20.00000 20.00000 20.000000 .000000 375.0000 IN. 2 RN/L . RN/L * RN/L = RN/L = R:1/L = ALPHAC 2.00000 4.00000 6 ALPHAC 2.00000 4.00000 ALPHAC 2.00000 4.00000 0 6 0 6 0 /0 ALPHAC 2.00000 4.00000 ALPHAC 2.00000 4.00000 0 0 XMRP YMRP ZMRP FUN NO. RUN NO. RUN NO RUN NO. RUN NO. MACH .58700 .58651 .00000 MACH .58572 .58560 .00000 MACH .58806 .58578 .00000 . 58763 . 58716 . 00000 MACH .58729 .58764 .00000 REFERENCE DATA 2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN. AL PHAO 10.000 12.000 GRADIENT ALPHAO 10.000 12.000 GRADIENT ALPHAO 10.000 12.000 CRADIENT ALPHAO 10.000 12.000 GRAD:ENT ALPHAO 10.000 12.000 GRADIENT 02 10.000 10.000 02 15.000 15.000 92 30.000 30.000 DZ 45.000 45.000 02 50.000 50.000 SREF LREF BREF SCALE

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163	175)		5.000 .000 20.000 .600	ı	CBL 00172 00224 .00000		CBL 00185 00233		CBL 00202 00237 .00000		CBL 00193 00254 .00000		CBL 00226 00224 .00000		CBL 00211 00246 .00000
PAGE	1 (17 001	DATA	STAB = ELEVON = DX MACH =		. 00003 00003 000003		. 00000 . 00005		CYN .00000. 00000.		CYN .00008 00002		CYN 00016 00046		CYN 00023 00044
	(1EXHNZ)	PARAME TR 1C	0000.		. 00717 . 00717 . 00701		.00714 .00718 .00000		.00713 .00713 .00713		.00000		CY .00726 .00667 .00000		. 00000
			BETA RRUDDER R 10RB RDY R	0/ 5.00	CLM .03120 .03871 .00000	1/ 5.00	CLM .02991 .03785	00.5 /	CLM .02916 .03725	00.5 /(CLM .02878 .03578	00.5.00	CLM .03026 .03870 .00000	00.5.70	CLM .03062 .03982 .00000
	ITER DATA)			-5.0	.04961 .06042 .00000	AL = -5.00.	. 05023 . 05124 . 00000	AL = -5.00.	CD .05039 .06181	'AL = -5,00/	CD .05031 .05247 .00000	5.0	CD .05264 .05530	/AL = -5.00.	CD .05336 .06739
A - CA23B 20(CA23B) 747/1 ATI 03SI (ORBITER			GRADIENT INTERVAL	CL .27510 .33292 .00030	GRADIENT INTERV	CL .28123 .33913 .00000	GRADIENT INTERVAL	CL .28603 .34346 .00000	GRADIENT INTERVAL	CL .28787 .34870 .00000	GRADIENT INTERVA	CL . 29595 . 36524 . 00000	GRADIENT INTERVAL	CL .29863 .37648 .00000	
			3.31 GRAD	07 .03430 .11658	3.30 GRAD	DY .05331 .08012	3.30 GRAC	PY .07032 .05234	3.30 GRAD	70 .02941 .00000	3.29 GRAD	70 -00000. -00000	3.30 GRA	04. 09486 06729	
DATA -	14-120(CA23B		00000 00000 00000 00000	RN/L =	DX 20.00000 20.000000	RN/L =	0x 20.00000 20.00000	RN/L =	20.00000 20.00000 20.00000	RN/L =	0x 20.00005 50.00000	RN/L =	0x 20.00000 20.000000	RN/L =	20.00000 20.00000 20.00000
ED SOURCE	ARC		0.09.0 0.0 * 375.0	0 /0	ALPHAC 2.00000 4.000000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.09090 4.09060	0 /0	4. 00000 0.00000 0.00000	0 3	AL BLACO 4. CCCCO CCCCO CCCCO	0 / 0	ALPHAC 600000.4 000000.7
TABULATE		E DATA	YMRP YMRP ZMRP	RUN NO.	MACH .58478 .58701	FUN NO.	MACH .58500 .58679	FLOR NO.	MACH .58711 .58647 .00000	RUN NO.	MACH .58715 .58714 .00000	PUR NO.	MACH .58705 .58711	PUN NO.	MACH .587;9 .58694 .00000
75 76	REFERENCE DA	690.0000 SQ N74.8100 IN 936.6800 IN		ALPHAO B.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT		AL PHAO B. D00 10. D00 GRAD 1 ENT		ALPHAO 8.000 10.000 GPADIENT		ALPHAO 8.000 10.000 GRAD!ENT	
SATE 23 MAR			STEP IN STATE IN STAT		02 3.500 3.500		02 7.500 7.500		02 10.000 10.000		02 15.000 15.000		02 30.000 30.000		02 45.000 45.000

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(5- 1	5,000 20,000 20,000		CBL 00217 00241 .00000	1 75)		5.000.		CBL 00214 00257 .00000		CBL -,00226 -,00064		CBL -,00229 -,00274 -,00000		CBL 00244 00267 .00000
	DATA STAB CELEVON = DX MACH		CYN 00024 00000) (17 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN 00023 00052		CYN 00050 00065		CYN 00049 00070		CYN 00061 00063 .00000
NHX31	PAPAME 1910 .000 .000 6.000		CY .00645 .00691	(ZNHX34	PARAME TRIC	0000. 8.0000		.00917 .00908 .00000		CY .00862 .00853		.00856 .00848 .00848		CY .00859 .00863
	BETA * RUDDER * 10RB ≈ DY *	.00/ 5.00	CLM .03066 .03986 .00000			BETA # RUDDER # IORB # DY	00/ 5.00	.04780 .05782 .05782	00/ 5.00	CLM .04342 .05330 .00000	00/ 5.00	CLM .04126 .05163	.007 5.00	CLM . 03831 . 04868 . 00000
(ORBITER DATA)		ដ	CD . 05362 . 06780 . 00000	ORBITER DATAL			" 'J	CD .04685 .05713	VAL = -5.	CD .04758 .05828	. * -5.	.04797 .05890 .05890	ر. دی	00000.
ATI 0351 (OR		GRADIENT INTERVAL	CL . 29954 . 37739 . 00030	TI 0351 (GRADIENT INTERVAL	CL .27468 .32933 .00000	ADIENT INTER	CL .27938 .33730 .00000	GRADIENT INTERVAL	CL .27895 .34172 .00000	GRADIENT INTERVA	Ci. .28282 .34730 .00000
747/1		3.30 GRA	02027 .02027 .02391 .00000	38) 747/1 A			3.31 GRA	.07105 07105 01586	3.30 GRA	03982 03982 04258	3.30 GRA	07 03324 06070 .00000	3.30 GR/	05303 05303 07127
14-120(CA23B)	0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L	0x 20.00000 20.000000	14-120(CA23		0000 IN. 2000 IN. 200	RN/L =	00000 00000 00000	RN/L =	000000 000000 XG	RN/L =	000000 .	RN/L =	00000. 00000.
ARC	1109.0 .0 .0.375. m	0 /0	ALPHAC 2.00000 4.00000	ARC		1109.0 10 10 10 10 10 10 10 10 10 10 10 10 10	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.000000	0 /0	ALPHAC 2.00000 4.00000 1.00000	0 /0	ALPHAC 2.00000 4.00000
į	CE DATA .FT. XMRP . YMRP . ZMSP	RUN NO.	масн . 58699 . 58709 . 00000		E DATA	1.FT. XMRP 1. YMRP 1. ZMRP	RUN NO.	MACH .58780 .58730 .00000	RUN NO.	MACH . 58691 . 58751	RUN NO	масн . 58688 . 58670 . 00000	NOW NO	MACH . 58673 . 58727 . 00000
	REFERENCE DATA 2690.0000 SO.FT. 474.8100 IN. 936.6800 IN.		ALPHAO 8.000 10.000 GRADIENT		REFERENCE DATA	2690.0000 SQ.F 474.8100 IN. 936.6800 IN.		AL PHAO 8,000 10,000 GRADIENT		ACPHAO 9,000 10,000 GRAD,ENT		ALPHAD 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT
	SREF LREF B.2EF SCALE		52 50.000 50.000			SAEF # BREF # SCALE #		02 3.500 3.500		52 7.500 7.500		DZ 10.000 10.000		02 15.000 15.000

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465	15)		5.000	000.		CBL 00260 00277		CBL 00265 00248 .00000		CBL 00256 00265	1 75)		5.000 5.000 .000		CBL 00109 00053		CBL 00101 00068 .00000
PAGE	17 001	ATA	TAB -	ELEVON B DX MACH		CYN 00046 000094		CYN 00068 00095		CYN -,00058 -,00082	100 (17 001	DATA	STAB # ELEVON # DX MACH #		. 00000 . 000013		CYN . 000044 . 00000
	(5XHNZ)	PARAMETRIC D		000.9		. 000836 . 00035		CY .00805 .00795 .00000		. 00000 . 000294 . 00000	(ZNHY10	PARAME TR I C	000 000 8 000 000		CY .00406 .00538 .00000		CY .00389 .00517 .00000
		a.	# DO	RUDDER = 10RB = 10RB	/ 5.00	. 03705 . 04641 . 00000	00.5 /	CLM .03537 .04500	3/ 5.00	.03508 .03508 .04479			BETA * RUDDER = 10P8 * DY *	.00/ 5.00	CLM .02801 .03341 .00000	00/ 5.00	CLM .02638 .03155 .03050
	ITER DATA)				AL = -5.00	. 05110 . 05416 . 00000	'AL = -5.00	. 05248 . 06661 . 00000	/AL # -5.00	co .05269 .06730 .00000	(ORBITER DATA)			٠. در	. 10124 . 12511 . 00000	AL = -5.	. 10190 . 12787 . 00000
	1 0351 (ORBITER				GRADIENT INTERVAL	CL . 29362 . 36715 . 00000	GRADIENT INTERVAL	CL .29754 .37919 .00000	DIENT INTERV	CL , 29988 , 38230 ,00000	T1 0251 (OR			GRADIENT INTERVAL	CL .46595 .53870 .00000	GRADIENT INTERV	CL. .46870 .54574 .00000
m	T47/1 AT				65.	. 03707 - 03707 - 08604 - 00000	. 30	00594 -, 00594 -, 00000	3.30 GRAD1	70 01817 04505 00000.	381 747 185			3.34 CRA	000000	3.34 GRA	00000 000000 000000 100000
DATA - CA238	7			200 200 200 200 200 200 200 200 200 200	RN/L = 3	000000.	RN/L = 3	X000 0000 0000 0000	RN/L =	000000 000000 XQ	14-1201CA23			RN/E	0X - 01667 05070	FN/L	の 所 の
SOURCE	ARC			1109.90000 100000 1000000000000000000000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.000000	0 0	ALPHAC P.00000 4.00000	ARC		# 1:09 # 375	0 /0	AL P. 00003 00003 000000 0000000000000000000	ó 6	24 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 -
TABULATED		0.4140	[XXRP XXXP ZXRP	SCN NO.	MACH .58733 .58712	RUN NO.	MACH .58710 .58749	N NO	MACH . 58804 . 58759		-F DATA	TYPE YAPP	ON NOW	MACH .59503 .59130	RUN NO	MACH . 19531 . 19576 . 10000
75		December 104		2690.0000 50.F 474.8100 1N. 935.6800 1N.		AL PHAO 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRAD!ENT			2690,0000,00.6 474,8100,1N. 936,6900,1N.		ALPHAD 10.000 12.000 GRADIENT		AL PHAO 16.000 12.000 GRADIENT
24 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	C			SARF = 26 CAEF = 4 BARF = 9	ļ	02 30.000 30.000		02 45.000 45.000		50.000 50.000 50.000			SAEF LREF = 2 SCAEF = 2		02 3.500 3.500		02 7.500 7.500

CBL -.00085 -.00061 .00000 CBL -.00110 -.00098 CBL .00081 .00090 CBL -.001CB -.00080 CBL -.00088 -.00078 5.000 5.000 .000 .000 (17 OCT CYN . 00050 . 00034 CYN .00032 -.00039 CYN .00015 .00045 CYN .00020 .00038 .00018 .00018 -.00036 STAB ELEVON DX PARAMETRIC DATA (ZNHY10) CY .00390 .00522 .00000 CY .00316 .00480 CY .00347 .00382 CY .00347 .00391 .00000 CY .00307 .00391 .00000 CLM .02522 .03022 CLM .02019 .02377 .00000 CLM .02377 .02855 .00000 CLM .02:53 .02576 .00000 CLM .01936 .02319 .00000 BETA RUDDER 10RB DY 5.00 5.00 5.00 5.00 5.00 -5.06 GRADIENT INTERVAL = -5.00/ 3.35 GRADIENT INTERVAL = -5.00/ GRADIENT INTERVAL = -5.00/ -5.00/ 747/1 ATI 0251 (ORBITER DATA) CD .10252 .12978 .00000 CD .10333 .13146 .00000 . 10649 . 13664 . 13664 CD .10835 .13989 CD .10811 .14970 .93900 GRADIENT INTERVAL * GRADIENT INTERVAL CL .47109 .55061 .00000 CL .47133 .55529 .00000 CL .48237 .57435 00000 CL . 49074 . 58589 . 00000 CL .48705 .58919 .00000 .00000 .00000 000000 . 00000 .00000 3.33 3.35 ARC 14-1201CA23B1 0 0 0 X X X ..03048 -.07336 .00000 0X -.02992 -.07123 DX -.08807 -.11959 .00000 DX -.10677 -.19602 .00000 0X -.01444 -.12143 375.0000 in. 375.0000 # 1/N PN/L = ₹// = FN/L = AL PHAC 2.00000 4.00000 6 AL PHAC 2.00000 4.000000 AL PHAC 2.00000 4.00000 000 ALPHAC R.00000 4.000000 ALPHAC 2.00000 4.000000 6 0 /0 0/6 XMRP YMBP ZMBP SCN NO. FIGN NO. PUN NO. RUN NO 011 110 МАСН . 59752 . 59802 . 00000 MACH .59633 .59726 .00000 MACH . 59637 . 59584 . 00000 740H .599459 .00000 REFERENCE DATA 2690.0000 SQ.FT. 474.8100 !N. 936.6800 IN. ALPHAO 10.300 12.000 GRAD!ENT ALPHAO 10.000 12.000 GRADIENT ALPHA0 10.533 12.030 GRADIENT ALPH40 10,000 12,000 GPADIENT ALPHAO 10.000 12.000 GRADIENT DZ 10.000 10.000 02 15.000 15.000 02 30.000 30.000 02 45.000 45.000 50.000 50.000 50.000 SREF LREF BREF SCALE

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467	. 27		5.000 5.000 .000		CBL 00059 00075		CBL 00071 00079		CBL 00082 00094		CBL 00082 00100		CBL 00102 00105		CBL 00091 00086
PAGE	(17 OCT	DATA	STAB # ELEVON ** DX MACH #		CYN .00099 .00071	5	CYN .00098 .00070		CYN .00090 .00065		CYN .00088 .00058		. 00083 . 00061 . 00000		00000.
	(ZNHY13)	PARAMETRIC D	0000.0000.00000000000000000000000000000		.00301 .00301 .00000		CY .00240 .00237 .00000		.00195 .00247 .00000		CY .00192 .00524		.00188		00154 .00154 .00000.
		a	BETA RUDDER 10PB R	00.5 /	CLM .02502 .03221 .00000	/ 5.00	CLM , 02938 , 02926 , 00000	1/ 5.00	CLM .02:75 .02649	0/ 5.00	CLM .02038 .02685 .00000	0/ 5.00	CLM .01835 .02451 .00000	00/ 2.00	00000.
	747/1 ATT 0251 (OPBITER DATA)			ال5.00،	00000. .09028 .09464	AL = -5.00	CD . 08069 . 09597 . 00000	AL = -5.00	00 . 08084 . 09542 . 00000	AL = -5.00,	. 09790 . 09790	AL = -5.0	00000. 10159 00000.	ı,	CD . C8554 . 1 nv 11 . oucko
				IENT INTERVAL	. 35204 . 41371 . 00000	IENT INTERV	CL .35307 .42957 .00000	GRADIENT INTERVAL	CL .35427 .42275 .00000.	ADIENT INTERVAL	CL .35606 .42561 .00000	ADIENT INTERV	Ct. . 25560 . 44 476 . 00000	GRADIENT INTERVAL	CL . 25973 . 41.437 . 65000
m.				.34 GRADIENT	00000 .00000 .00000	.34 CAAD	00000.	. 33	00000.	3.35 GRAD	YQ .00000 .00000 .00000	3.35. GRAD	0.000.00 .0000.00 .00000.00	3.35 GRAE	70 00000 000000 000000
DATA - CA23B	14-120(CA238)		50 IN. XO 50 IN. YO 50 IN. ZO	FN/L . 3	DX 03811 06523 .00000	RN/L = 3	01798 04063	RR/L = 3	01436 01436 07557	BN/L = 3	03. -,101780 -,00000	R:4/L *	200982 - , 69251 - , 60000	RN/L *	, DX , 04067 , 064459 , 06030
SOURCE	ARC .		1109.000 2 .000 375.63	0 /0	AL PHAC 2.00333 4.00030	0 '0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00030 4.00000	0 /0	ALFHAC 2.00000 4.00000	0 /0	AL PHAC 2.00000 4.00000	0 /0	# PH46 6.0000 4.00000 .00000
TABULATED		DATA	T. XMRP YMRP ZMRP	RUN NO.		RUN NO.	MACH .59261 .59217 .00000	FUN NO.	MACH . 59174 . 59204 . 60000	RUN NO.	MACH . 59103 . 59103 . 00000	PUN NO.	#3628 #3628 #3628	RUN NO.	MACH .59095 .59197 .00000
76		REFERENCE DATA	930.0000 SQ.F 474.8100 IN. 936.5800 IN.		AL PHAO 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT		ALPHAO B.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GPADIENT		AL PHAU 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 6PAD1ENT
년 82 84			#### #### Bara		DZ 3.500 3.500		02 7.500 7.500		05 10 000 10 000		02 15.000 15.000		02 30.000 30.000		005 45.000 45.000

3	4 18	CT 75)		5.000 5.000 5.000	, ,	CBL - 00105 - 00092	90000.	CBL 00114 00091	175)		5.000 5.000	. 300	CBL 00040 00047	•	CBL 00048 00041				
1. (* 0	Ę	(170	DATA	STAB ELEVON # DX		CYN .00093 .00093	00000	CYN . 00090 . 00090	17 001	DATA	STAB • ELEVON • DX		CYN .00073		CYN .00050 .00071				
		(NHW+1)	PARAMETRIC	0000.		CY .00263 .00305	. 00021	CY .00254 .00300 .00023	O TWHWA	PARAMETRIC			CY .00326 .00315		CY . 00189 . 00266 . 00038				
		_		BETA RUDDER I		CLM .00782 .01574	96500.	CLM .00757 .01537			BETA ERUDDER E		CLM .01568 .02255	1	CLM .01347 .01997 .00325				
		UNBITER DATA)			7,007	0.5 07345 08373	5.00/ 5.00	CD . 07378 . 08445	(ORBITER DATA)			.00/ 5.00	CD . 06851 . 07713	.00/ 5.00	06979 . 07887 . 07887				
	C) 1360 114				INTERVAL * -	8000 5279		CL .28209 .35752	A11 0251 (OR			ERVA. = -5	CL .24783 .30620 .02919	INTERVAL = -5.	CL .31786 .02944				
CA238	747/1	-			GRADIENT IN	0Y 09718 14783 02532	GRADIENT INT	DY 08635 14681 03023	1/44		-	GRADIENT INTERVAL	07 01679 02787 00554	GRADIENT INTE	. 04520 02685 02917				
DATA -	ARC 14-120(CA23B)	-		0000 IN. XO 0000 IN. YO 0000 IN. ZO	1.97	XO 07934 09778		0X 08686 12072 01693	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	1.98 G	0x 01826 00129	1.98 6	DX 06493 07572 00539				
TABULATED SOURCE				, ;				1109,	RN/L	10RB 4.01317 3.947 ⁷ 7	RN/L.	10RB 3.99721 3.94057 02832	ARC		1109.	RN/L .	10RB 3.96366 3.93590 01389	RN/L .	10R8 3.99447 3.98402 00522
TABU		REFERENCE DATA						SO.FT. XMRP IN. YMRP IN. ZMRP		MACH • 50000 • 50000		#AACH . 50000 . 50000		<	1. YMRP YMRP I. ZMRP		. 30000 . 30000 . 00000		. 30000 . 30000 . 00000
3 / X 4 E		REFERE		2000.0500 474.8100 935.6800 10.85		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC Z.000 Y.000 GRADIENT		4F L HE 3	2690.0000 SQ 474.8100 IN 936.6800 IN	,	3.500 ALPHAC 2.000 4.000 GRAD:ENT		7,500 ALPHAC 2,000 4,000 GRADIENT				
2 5 3 3 5 5			ı	BREF = SCALE =		• Z0	!	• . Zg			LREF = 2 LREF = 2 BREF = 5 SCALE =		70	,	• 20				

419	1 57		5.000 5.000 .000		CBL 00084 00017 .00019		CBL 00051 00083 00016		CBL 00097 00083		CBL -,00073 -,00051		CBL 00050 00042
PAGE	(17 OCT	DATA	STAB FELEVON BOX		CYN .00035 .000043	٠	CYN .00059 .00056 00001		CYN .00053 .00044 -,00005		CYN .00053 .00041		CYN . 00057 . 00045 00006
	(VNHM42)	PARAMETRIC D	00000		. 00063 . 00063 . 00144		CY .00246 .00252 .00003		CY .00250 .00195		. 00198 . 001198 . 000119		CY .00209 .00117 00046
		u.	BETA RRUDOER RIORB R		CLM .01200 .01912		CLM .01076 .01819		CLM .00924 .01711		CLM .00835 .01558		CLM .00809 .01499 .00345
	(ORBITER DATA)			-5.00/ 5.00	CD .07000 .07979 .00489	.00/ 5.00	CD . 07178 . 08097 . 00460	.00/ 5.00	CD . 07425 . 08424 . 00500	.007 5.00	CD . 07544 . 08543 . 00500	00/5 /00	CD . 07587 . 08564 . 00488
	0251			INTERVAL = -5.	CL .25472 .32044 .03286	INTERVAL = -5	CL . 264 16 . 33075 . 03330	INTERVAL = -5	CL .27456 .34867 .03705	INTERVAL = -5	CL. .28098 .35594 .03748	INTERVAL = -5	CL .28410 .35813 .03702
æ	3) 747/1 ATI			GRADIENT INTE	.01635 04987 01676	GRADIENT INT	07 02784 03544 00380	GRADIENT INT	70 46580 46580	GRADIENT INT	DY 12238 10952	GRADIENT INT	DY +.16157 13170 .01493
DATA - CA238	14-120(04238)		00000 00000 00000	1.98 G	0x -,00117 -,08873 -,04378	1.98	0X 07846 04327	1.97	DX 11489 07696 -01896	1.97	0x 09171 05811	1.97	DX 09355 04034
TED SOURCE	ARC		# 1109. # 375.	RN/L =	1088 3.95201 3.99449 .02124	RNI/L	1088 4.00542 3.96126 02208	RN/L =	10RB 4.02939 3.97863 02538	RN/L =	1088 4.02411 3.98272	RN/L	1CPB 4.02982 3.97770 02608
TABULATED		CE DATA	YMRP YMRP ZMRP		МАСН . 30000 . 30000 . 00000	MACH .30000 .00000		.30000 .30000		МАСН .30000 .30000		MACH .30000 .30000	
MAR 76		REFERENCE DAT	2690.0000 So 474.8100 IN 936.6900 IN		10:000 ALPHAC 2:000 4:000 GRADIENT		15.000 ALPHAC 2.000 4.000 GRADIENT		30.000 ALPHAC P.000 4.000 GRADIENT		45.000 ALPHAC 2.000 4.000 GRADIENT		* 50.000 ALPHAC 2.000 4.000 GRADIENT
DATE 23 MA			SREF = 6 LREF = 6 BREF = 5 SCALE = 5		• zq		• 20		• ZO		. 20		20

TABULATED SOURCE DATA - CA23B

DATA)
ITER
(ORB
0251
AT!
147/
14-120(CA23B)
ARC

(ZNH008) (17 OCT 75)

1 75 1				CBL 00062 00075 00082		CBL 00056 00081		CBL 00085 00116 00103		CBL 00089 00111 00101		CBL 00095 00118 00119
B) (17 0CT	DATA	STAB ELEVON BOX		CYN .00123 .00105 .00074		CYN .00115 .00009		. 00008 . 00008 . 00008 . 00008		CYN .00102 .00091 .00066		CYN .00100 .00086 .00049
800HNZ)	PARAME TRIC			CY .00356 .00395 .00381		CY .00303 .00328 .00345		CY .00239 .00134 .00290		CY .00269 .00268 .00327 .00000		CY . 00226 . 00305 . 00000
		BETA RUDDER RIORB RIORB RIORB	0/ 5.00	CLM .01668 .02385 .03130	0/ 5.00	CLM .01297 .02130 .02836	0/ 5.30	CLM .01176 .02080 .02724 .00000	2/ 5.00	CLM .01011 .01906 .02584	5.00	.00775 .01703 .02308
ONDITER DAIA			VAL = -5.00/	CD .06975 .07509 .09319	VAL = -5.00/	CD .07097 .07989 .09493	/AL = -5.00,	.07151 .07151 .08041 .09571	/AL ≠ -5.00/	CD . 07238 . 08146 . 09742	'AL = -5.00/	.07406 .07406 .08412 .10132
			GRADIENT INTERVAL	CL. . ::8470 . :34150 . :00441	GRADIENT INTERVAL	CL .28831 .34513 .41323	GRADIENT INTERVAL	CL .24885 .34925 .41402	GRADIENI INTERVAL	Ct .28632 .34861 .42038 .00300	GRADIENT INTERVAL	CL . 28526 . 35905 . 43664 . 00000
			3.34 GRA	. 18918 - 10106 - 18983	3.35 GRA	07 36797 31915 46731	3.35 CRAI	07 -,47390 -,41868 -,00000	3.35 GRA	DY 47798 34585 40137	3.35 GRAD	DY 40582 33416 40864 .00000
		.00000 IN. XO .00000 IN. YO .00000 IN. ZO	RN/L =	.67175 .67175 05416 07544	FIN/L =	09481 01120 05854	RN/L =	0x -,15116 -,03752 -,02591	RN/L =	00000.	RN/L =	. 09209 . 00780 . 10720 . 00000
		# 1109 # 375	0 /0 .	ALPHAC 000000 000000	0 /0 .	ALPHAC .00000 P.00000 4.00000	0 /0	ALPHAC .00000 R.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	AL PHAC .00330 P.00000 4.00000
REFERENCE DATA	ı.	FT. XMRP. YMRP. ZMRP	RUN NO	MACH .59057 .59028 .59028	RUN NO	MACH .58987 .58902 .59118	RUN NO	масн . 59202 . 59301 . 59058	RUN NO.	МАСН . 5925 5 . 59219 . 59101	RUN NO.	MACH . 59159 . 59155 . 59167
NOCECOCK		2690.0000 SO 474.8100 IN 936.6800 IN .0125		ALPHAO 6.000 8.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRADIENT		AL PHAO 6.000 8.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRADIENT		ALPHAD 6.000 8.000 10.000 GRAD!ENT
		SCALE **		52 3.500 3.500 3.500		02 7.500 7.500		02 10.000 10.000		02 15.000 15.000		DZ 30.000 30.000 30.000

PHICHINAL SECTION OF THE SECTION OF

CBL -. 00057 -. 00051 -. 00057 -. 00057 CBL -.00073 -.00053 -.00064 CBL -.00091 -.00091 -.00091 CBL -.00087 -.00109 -.00113 75 PAGE 421 (17 OCT 75 17 OCT CYN .00087 .00008 .00008 CYN .00092 .00015 CYN .00085 .00043 CYN .00000. .00004 STAB ELEVON DX STAB ELEVON DX MACH MACH PARAMETRIC DATA PARAMETRIC DATA (500HNZ) (2NH00B) CY .00396 .00452 .00548 .00154 .00182 .00258 CY .00468 .00455 .00519 .00176 .00174 .00266 .000 .000 .000 .000 CLM .02127 .02781 .03390 CLM .01856 .02612 .03199 CLM .00632 .01523 .02121 CLM .00616 .01485 .02060 BETA **
RUUDER **
LORB **
DY 5.00 5.00 -5.00/ 5.00 BETA RUDDER 10RB DY -5.00/ 5.00 GRADIENT INTERVAL = -5.00/ GRADIENT INTERVAL = -5.007 ARC 14-120 (CA23B) 747/1 ATI 02SI (ORBITER DATA) ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA) CD .08390 .09996 .12278 CD .08553 .10016 .12455 CD .07547 .08629 .10491 CD .07525 .08573 .10447 GRADIENT INTERVAL . GRADIENT INTERVAL CL .39564 .45578 .52598 .00000 CL .39569 .46035 .53183 .00000 CL -28293 -36228 -45028 CL .28567 .36357 .45185 -,28840 -,55882 -,58163 DY -,46973 -,49652 -,53884 -,00000 -,53060 -,45502 -,48963 -,00000 -,47401 -,48235 -,52115 3.33 3.35 3.34 TABULATED SOURCE DATA - CA23B 1109.0000 IN. YO 375.0000 IN. ZO 0x . 04229 . - 15757 - 20162 -2.01:03 -3739: -.0250+ 1139.0009 IN. XO 0000 IN. YO 375.0000 IN. ZO -.07540 .00616 -.16935 PN/L = EN/L = RN/L . AL PHAC .00303 2.03333 4.00000 ALPHAC .00000 P.00000 4.00000 0 % ALPHAC .00000 P.00000 4.00000 ALPHAC . 000000 . 2 . 000000 . 4 . 000000 6 RUN NO XMRP YMRP ZMRP S N S XMRP YMRP ZMRP SUN NO RUN NO MACH .5839; .59113 .59117 MACH . 59329 . 59239 . 59204 MACH . 59230 . 59245 . 59245 MACH .58956 .59001 .59111 REFERENCE DATA REFERENCE DATA 2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN. 2690.0000 SQ.FT. 474.8130 lN. 936.6800 lN. AL PHAO 8.000 10.000 12.000 GRADIENT ALPHAO 6.000 8.000 10.000 GRADIENT AL PHAO 8.000 10.000 12.000 GRADIENT AL PHAO 6.000 8.000 10.000 GRAD IENT DATE 23 MAR 76 02 3.500 3.500 3.500 50.000 50.000 50.000 50.000 SREF "LREF" PREF "SCALE " SREF LREF BREF SCALE

ARC 14-120(CA23B) 747/1 AT! 0251 (ORBITER DATA)

(ZNH009) (17 OCT 75)

	5.000		CBL 00100 00074 00066		CBL 00102 000101 00078		CBL 00124 00011 00063		CBL 000115 000079 000000		CBL 00119 00011 00073
DATA	STAB = ELEVON = DX = MACH =		. 00090 . 000090 . 00009		CYN .00068 .00040 00023		. 00033 - 00033 - 00035		CYN .00073 .00026 00031		CYN .00072 .00080 00047
PARAMETR1C	000 000 000 000 000		. 00344 . 00344 . 00579 . 00579		CY .00243 .00316 .00546		.00249 .00378 .00577 .00577		CY . 00262 . 00333 . 00502		. 00281 . 00334 . 00457
	BETA RUDDER I	00/ 5.00	CLM .01898 .02491 .03968	0/ 5.00	CLM .01744 .02354 .02880	0/ 5.00	CLM .01550 .02129 .02602	0/ 5.00	CLM .01353 .01951 .02353	0/ 5.00	.00000
		* **	. 10023	VAL = -5.00/	CD . 08468 . 10084 . 12745	VAL = -5.00	CD .08659 .10428 .13387	/AL = -5.00/	. 00000	/AL = -5.00/	CD .08811 .10625 .13800
		GRADIENT INTERVAL	CL .39692 .45528 .53670	GRADIENT INTERVAL	CL .38362 .45715 .53951	GRADIENT INTERVAL	CL .38623 .46621 .56267	GRADIENT INTERVAL	CL .38116 .46793 .57321	GRADIENT INTERVAL	CL .38467 .47247 .57618
		3.35 GRA	07 -,48612 -,43816 -,53020	3.35 GRA	0Y -,39780 -,46944 -,53470	3.35 GRA	04 -,52196 -,42881 -,53052	3.34 GRAI	7 - , 55849 - , 45507 - , 45507	3.33 GRA	DY -,52363 -,48819 -,46192
	0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L .	0x -,07935 -,05658 -,05430	FN/L =	0x 18171 01052 09143	RN/L	00000	RN/L =	00000. - 004829 - 15068	PN/L	00194 00194 09528 00000
	= 1109. = 375.	0 /0 .	ALPHAC .000000 2.000000	0 ,0	AL PHAC . 00000 2.00000 4.00000	0 %	ALPHAC .00000 2.00000 4.000000	0 /3	AL PHAC	0 / 0	ALPHAC . 95359 2.03099 4.05030
CE DATA	FT. XMRP. YMRP. ZMRP	RUN NO	MACH .59127 .59204 .59073	RUN NO	MACH . 59244 . 59188 . 59315	RUN NO	MACH .59222 .59285 .59137	RUN NO	MACH .59197 .59198 .59598 .00000	RUN NO	MACH . 59198 . 59167 . 59268
REFERENCE DATA	2690.0000 SO 474.8100 IN 936.6900 IN		AL PHAO B.000 10.000 12.000 GRADIE::T		ALPHAO 8.000 10.000 12.000 GRADIENT		ALPHAO B.000 10.000 12.000 GRADIENT		ALPHAO 8.000 10.000 12.000 GRADIENT		ALPHAO 8.003 10.003 12.000 GRADIENT
	SREF = 2 LREF = BREF = SCALE =		02 10.000 10.000 10.000		02 15.000 15.000		DZ 30.000 30.000 30.000		DZ 45.000 45.000 45.000		52.000 50.000 50.000

423	. 27		5.000 5.000 .000		CBL 00125 00032 00095		CBL 00112 00104 00074		CBL 00100 00074 00050		CBL 00116 00105 00087		CBL 00126 00105 00074
PAGE	(17 007	DATA	STAB ELEVON DX MACH		. 00000 . 00035 00000		. 00009 . 00043 000027		CYN .00087 .00054 00033		CYN .00073 .00034 00038		00000.
	(2NH0 1 0)	PARAMETRIC D			. 00000 . 00502 . 00502		CY .00349 .00390 .00515		CY .00291 .00396 .00532		CY .00241 .00322 .00400		CY .00178 .00310 .00399
		D.	BETA BRUDDER BIORB BY	1/ 5.00	CLM .02338 .02802 .03345	00.5 /0	CLM .02119 .02634 .03153	0/ 5.00	CLM . 01947 . 02514 . 03018	0/ 5.00	CLM .01834 .02370 .02849	00'5 /00	. 01613 . 01613 . 02148 . 02569
	TER DATA	•		AL5.00	. 08350 . 10105 . 12530	'AL = -5.00.	.08465 .08465 .10196 .12793	-5.0	CD . 08523 .10259 .12984 .00000	VAL +5.01	CD .08581 .10340 .13157	.5.	CD .08756 .10653 .13672
	1 0251 (ORBITER			GRADIENT INTERVAL	.40170 .45538 .53935 .00000	GRADIENT INTERVAL	CL .39869 .46891 .54590	GRAD:ENT INTERVAL	CL .39577 .47103 .55078	GPADIENT INTERV	.39708 .47153 .55541	GRADIENT INTERVAL	CL .39814 .48257 .57413
œ	1 747/1 ATI			3.33 GRAD	. 39993 . 39993 . 71214 . 67475	3.32 GRAD	08072 08072 1391 13091 00000	3.32 GRAI	0.40700 -,40700 -,59551 -,00000	3.3∂ GPA	07 36917 37159 40978	3.33 GRA	DY 51761 47056 46531
DATA - CA238	14-120(CA238		0000 IN. X0 0000 IN. Y0 0000 IN. Z0	RV/L = 3	0X 14459 03459 08236	FN/L =	0x 13105 03201 05084 .00000	RN/L =	74 14457 02652 07409	RN/L ≖	0x 13299 - 13299 - 107079	₽ J/Nd	0.4 10.394 00.765 11.834 00000
ED SOUPCE	ARC		. 375.0	0 /0	ALPHAC. 00000 4.00000 . 00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC . 000000 2. 000000	0 /0	ALPHAC .00000 4.00000	0 / 0	ALPH2C .00000 R.00000 4.00000
TABULATED SOUR		DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH .59528 .59463 .59120	RUN NO.	MACH . 59524 . 59624 . 59500 . 06000	RUN NO.	масн . 59458 . 59782 . 59822 . 00000	PUN NO.	масн . 59542 . 59651 . 59752	P.CN NO.	MACH .59671 .59659 .59605
R 76		REFERENCE DAT	2690.0000 SQ.F 474.8100 IN. 936.6800 IN.		AL PHAO 8.000 10.000 12.000 GRADIENT		AL PHAO 8.000 10.000 12.000 GRADIENT		AL PHAO B.000 10.000 12.000 GRAD IENT		ALPHAO 8.000 10.000 12.000 GRADIENT		AL FHAO 8.000 10.000 12.000 GRAD 1 ENT
DATE 23 MAR	;		SREF = 2 LREF = 8 BREF = SCALE =		52 3.500 3.500 3.500		DZ 7.500 7.500 7.500		02 10.000 10.000		02 15.000 15.000		02 30.000 30.000 30.000

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DATE 23 M.	MAR 76	TABULA	TABULATED SOURCE	DATA -	CA23B					PAGE	मेट्रेन ज
			ARC	14-120(CA23B)	3B) 747/1 AT1	0251	(ORBITER DATA)		(2NH010)	0) (17 007	1 75 1
	REFERENCE DAT	DATA							PARAME TRIC	DATA	
SREF = LREF = SCALE =	2693,0000 SQ.F1 474.8100 IN. 936.6800 IN.	T. XMRP YMRP ZMRP	1109.0 .0 .375.0	0000 IN. YO 0000 IN. ZO IN. ZO				BETA BRUDDER 10RB BDY		STAB ELEVON # DX MACH #	5.000 5.000 .000
		RUN NO.	0 %	RN/L =	3.33 GRA	GRADIENT INTERVAL	/AL =5.00/	00.5.00			
000 45.000 45.000 4.5.000	AL PHAO 8.000 10.000 12.000 GRADIENT	MACH .59578 .59641 .59539	ALPHAC .00000 4.00000 .00000	. 10371 - 10516 - 19518 - 00000	DY -,43686 -,42721 -,47170	.39755 .43091 .58585 .00000	CD .08839 .10540 .13991	.01507 .02014 .02371	. 00167 . 00350 . 00382 . 00000	.00064 .00019 00037	CBL001220007800087
		RUN NO.	6	FN/L =	3.32 GRAI	GRADIENT INTERVAL	/AL = -5.00.	00.5.70			
50.000 50.000 50.000	ALPHAO 8.000 10.000 12.000 GRADIENT	MACH .59362 .59473 .59456	ALPHAC .00000 4.00000	DX 01092 00946 12097	DY 44117 48167 53064 00000	CL . 39498 . 48703 . 58921 . 00000	. 08871 . 10815 . 14076	CLM .01439 .01928 .02312	CY .00159 .00351 .00395	CYN .00068 .00020 00038	CBL 00112 00087 00075
			ARC	RC 14-1201CA23B	1/242 (ATI OZSI (ORB	(ORBITER DATA)		(ZNH011)	1) (17 001	175)
	REFERENCE DATA	DATA							PARAMETRIC	DATA	
SREF # LREF # SCALE #	2690.0000 SO.F1 474.8100 IN. 936.6800 IN.	т. жжр үмэр 2мяр	. 1109.0 	0000 IN. YO 0000 IN. YO 0000 IN. ZO				BETA # RUDDER # 10RB # DY #	0000.	STAB = ELEVON = DX = MACH =	-1.000 5.000 .000 .600
		RUN NO.	0 /0	RN/L =	3.34 GRA	GRADIENT INTERVAL	/AL = -5.00/	1/ 5.00			
02 3.500 3.500 3.500	ALPHAO 4.000 6.000 8.000 GRADIENT	MACH .59330 .59263 .59218	ALPHAC 4.00000 4.00000	00000. - 03566 - 08058 - 00000.	.17585 18204 19776	CL , 18458 , 24155 , 29814 , 00000	CD . 06138 . 05543 . 07438	CLM .01110 .01691 .02408	. 00271 . 00371 . 00374 . 00000	. 00104 . 00111 . 00096 . 00000	CBL 00070 00061 00068
		RUN NO.	0 /0	RN/L =	3.35 GRA	GRADIENT INTERVAL	/AL = -5.00/	00.8 /			

CBL -.00070 -.00081 -.00095

CYN .00117 .00108 .00111

CY .00282 .00286 .00351

CLM .00828 .01423 .02153

CD .06!79 .06739 .07558

CL .19032 .24803 .30591 .00000

. 11285 - . 22680 - . 22635 - . 00000

0x -.21947 .10724 -.00587

MACH .59408 .59178 .59253

AL PHAO 4,000 6,000 8,000 GRADIENT

DRIGINAL PAGE IS DE POOR QUALITY

CBL -.00101 -.00092 -.00105 CBL -.00096 -.00098 -.00099 CBL -.00091 -.00082 -.00093 CBL -.00107 -.00098 -.00113 CBL -.000P3 -.00081 -.00093 5.000 t U PAGE (17 OCT . 00106 . 00106 . 00096 CYN .00120 .00102 .00100 CYN .00108 .00101 .00095 CYN . 00134 . 00130 . 00011 CYN .00124 .00103 STAB ELEVON DX MACH DATA (ZNH011) .00218 .00207 .00259 CY .00203 .00221 .00257 CY .00280 .00213 .00284 PARAMETR 1C CY .00367 .00340 .00321 CY .00341 .00305 .00310 .00016 .00772 .01632 CLM .00226 .00921 .01803 CLM .00068 .00805 .01670 .00000 .00680 .01297 .02055 CLM .00492 .01140 .01977 5.00 5.00 5.00 5.00 5.00 BETA RUDDER 10RB DY -5.00/ 3,33 GRADIENT INTERVAL = -5.00/ -5.00/ -5.007 3.34 GRADIENT INTERVAL = -5.00/ CD .06644 .07354 .08441 .00000 CD .06502 .07195 .08167 CD .06700 .07396 .08522 ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA) .06344 .06310 .05910 .07779 CD .06223 .06803 .07631 GRADIENT INTERVAL = CRADIENT INTERVAL GRADIENT INTERVAL CL .19293 .27704 .35823 .00000 CL .19290 .27317 .35252 .00000 CL .19275 .26263 .33510 . 19260 . 25400 . 31615 CL 19093 25074 30882 00000 -.23397 -.28003 -.22929 DY -,25594 -,29421 -,20810 -.16001 -.23880 -.23699 -.15353 -.23552 -.20103 -,15718 -,23642 -,24334 -,00000 3,35 3.35 3.35 TABULATED SOURCE DATA - CA23B DX -_07470 -.2:255 -.14676 .00000 DX -.06093 -.24187 -.17550 0X -.12417 -.01486 -.13120 DX -.13025 -.13397 -.12946 0x -.14626 .07409 .01922 = 7/Nz RN/L = " J/N: RN/L = ALPHAC .00000 .00000 .00000 .00000 ALPHAC . 56500 2.00000 4.00000 0 ALPHAC .00000 2.00000 4.00000 AL PHAC .00000 2.00000 4.00000 0 /0 0 6 ALPHAC .00000 2.00000 4.00000 0 6 PUN NO. NON NO RUN NO MACH . 59237 . 59289 . 59289 RUN NO. RUN NO XMRP YMRP ZMRP 74CH .59535 .59468 .59389 MACH .59363 .59363 .59510 74CH 59326 59326 59271 MACH .59257 .59162 .59123 REFERENCE DATA 2690.0000 SQ.FT. 474.8100 IN. 935.6900 IN. ALPHAC 4.000 6.000 8.000 GRADIENT ALPHAD 4 0000 6.000 8.000 GRADIENT ALPHAO 4.000 6.000 8.000 GRADIENT AL PHAO 4.000 6.000 8.000 GRADIENT ALPHAO 4.003 6.000 8.000 GRADIENT DATE 23 MAR 76 50.000 50.000 50.000 02 45.000 45.000 45.000 02 30.000 30.000 30.000 02 15.000 15.000 02 10.000 10.000 LREF . BREF .

ARC 14-120(CA238) 747/1 ATI 0251 (ORBITER DATA)

PAGE 426

(ZNH013)

			ብወ ቴቴ		10 cm / C		M 0: C		V 1.50 C		
· ?	7.000 .000 .000 .000		CBL 00044 00046		CBL -, 00046 -, 00059 -, 00057 -, 00057		CBL 00061 00069 00072		CBL 00067 00071 00085		CBL 00101 00095 00097
DATA		•	. 00101 . 00106 . 00081 . 00000		CYN .00111 .00104 .00078		CYN .00122 .00094 .00073		CYN .00106 .00092 .00064		00000 00000 00000
PARAMETRIC			CY .00186 .00293 .00268		CY .00206 .00237 .00234 .00000		CY .00243 .00184 .00246 .00000		CY . 00199 . 00184 . 00224		. 00211 . 00182 . 00182 . 00299
	BETA R RUDDER R 10R9 R DY	0/ 5.00	CLM .01711 .02524 .03232	0/ 5.00	CLM .01390 .02250 .02940	1 5.00	CLM .01306 .02188 .02853	/ 5.00	.01167 .02019 .02694 .00000	/ 5.00	CLM .00957 .01849 .02476
		/AL = -5.00/	.07128 .08002 .09443	/AL = -5.00/	. 00151 . 08048 . 09567 . 00000	AL = -5.00/	. 07176 . 08063 . 09609 . 00000	AL = -5.00/	. 07232 . 08195 . 09760 . 00000	AL = -5.00/	.07378 .08407 .10127
		GRADIENT INTERVAL	CL .29838 .35121 .41304	GRADIENT INTERVAL	CL .29525 .35221 .41977	GRADIENT INTERVAL	CL .29537 .35337 .42175	GRADIENT INTERVAL	CL. . 29399 . 35515 . 42557 . 00000	GRADIENT INTERVAL	CL . 29519 . 36502 . 44301 . 00000
		3.33 GRA	52888 45886 53850	3.32 GRA	DY -,42355 -,49988 -,51321	3.32 GRA	DY 44808 58353 59846 00000	3.32 GRA[07 47005 49785 52853	3.33 GRAE	DY -,45772 -,53834 -,50667 .00000
	0000 IN. XO. 0000 IN. YO. 0000 IN. ZO	RN/L .	DX 02265 03416 06456	FN/L =	DX . 03294 . 03940 . 00000	RN/L =	0x 18620 0033E 07451	RN/L =	DX - 11818 - 09841 - 01302	RN/L =	DX - 13369 - 02128 - 08049
	1109.0 .0 . 375.0	0 /0	AL PHAC .00000 2.00000 4.00000	0 / 0	ALPHAC .00000 2.00000 4.00000	0 / 0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 / 0	ALPHAC .00000 P.00000 4.00000
E DATA	FT. XMRP YMRP ZMRP	PUN NO.	MACH .59330 .59492 .59380	PUN NO.	MACH .59143 .59273 .59233	RUN NO.	MACH .59144 .59173 .59263	RUN NO.	MACH .59111 .59097 .00000	RCN NO.	MACH .59008 .59033 .59054 .00000
REFERENCE DATA	2690.0000 SQ. 474.8100 IN. 936.6800 IN.		AL PHAO 6.000 8.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRAD!ENT		ALPHAO 6.000 8.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRADIENT
	SREF LREF BREF SCALE		3.500 3.500 3.500		D2 7.500 7.500 7.500		10.000 10.000 10.000		02 15.000 15.000		30.000 30.000 30.000 30.000

427	75)		5.000 5.000 .600		CBL 00068 000097 000079		CBL -,00064 -,00056 -,00056	(5/		5.000 .000 .000 .600		CBL00107001220010400000		CBL 00120 00121 00119
PAGE) (17 OCT	DATA	STAB # ELEVON # DX # MACH #		CYN .00098 .00086 .00051		CYN .00098 .00090 .00054	1 (17 001	DATA	STAB ELEVON EDX MACH		CYN .00074 .00009 .00008		. 00076 . 00084 . 00084 . 00000
	(ZNH013)	PARAMETRIC (0000.		.00127 .00143 .00209		.00131 .00135 .00215	(2NH020	PARAMETRIC	00000		. 00274 . 00314 . 00355		CY .00262 .00328 .00390
		_	BETA = RUDDER = 10RB = DY	00/ 5.00	CLM .00866 .01724 .02296	0/ 5.00	CLM . 00789 . 01642 . 02222			BETA E RUDDER E 10RB E DY	00/ 5.00	CLM .04559 .05006 .05735	00/ 5.00	CLM . C4303 . 04732 . 05533
	(ORBITER DATA)			-5.	.07465 .07465 .08519 .10364	/AL = -5.00,	.07532 .08628 .10490	BITER DATA)			ii R	CD . 05485 . 05660 . 06184	L = -5.	CD . 05545 . 05733 . 06251
	AT1 0251 (ORE			GRADIENT INTERVAL	CL .29372 .36866 .45269	GRADIENT INTERVAL	CL .29206 .36978 .45785	AT1 0251 (0RB)			GRADIENT INTERVAL	. 11198 . 16309 . 22196	GRADIENT INTERVA	CL . 12113 . 16475 . 22543 . 00000
38	1 747/1			3.33 GRA	DY 53810 53705 55385	3.32 GRA	004 -,48797 -,52602 -,56621	1/247 (3.32 GRA	. 26345 - 25345 - 29278 - 00000	3.32 GRA	07 44775 37930 36577 .00000
DATA - CA238	14-120(CA238		00000 IN. XO 00000 IN. YO 00000 IN. ZO	RN/L =	0.00000.	FN/L =	02183 .02183 18551 18359	14-120(CA23B		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	DX 05223 02453 08535	RN/L =	0x 5.001 5.06:73 06510
TABULATED SOURCE	ARC		1109.0 .0 .105.0	0 /0	ALPHAC .00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	ARC		1109.0	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000
TABULA		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .59017 .59079 .00000	BUN NO.	MACH . 59036 . 59152 . 59141 . 06000		E DATA	YMRP YMRP ZMRP	NOW NOW	. 58859 . 58859 . 588359 . 00000	PUN NO	7,404 58707 58741 58730 00000
R 76		REFERENCE DATA	2690.0000 SO. 474.8100 IN. 936.6800 IN.		ALPHAO 6.000 8.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRADIENT		REFERENCE DATA	2690.0000 SO. 474.8100 IN. 936.6800 IN.		ALPHAO 4.000 6.000 8.000 GRADIENT		ALPHAO 4.000 6.000 8.000 GRADIENT
DATE 23 MAR			SREF = 2 LREF = BREF = SCALE =		02 45.000 45.000		50.000 50.000 50.000 50.000			SREF * CREF * SCALE *		02 3.500 3.500		02 7.500 7.500 7.500

ARC 14-120(CA238) 747/1 ATI 02SI (ORBITER DATA)

PAGE 428

(ZNH020)

	5.000 .000 .000 .600		CBL 0014¢ 00146 00117		CBL 00155 00140 00121		CBt 00163 00147 00150		CBL 00147 00155 00147		CBL 00139 00154 00144
DATA	STAB ELEVON # DX MACH #				CYN . 00078 . 00083 . 00076		CYN .00073 .00064 .00062		CYN .00070 .00066 .00057		CYN . 00068 . 00068 . 000054
PARAMETR1C	0000.		.00402 .00358 .00402 .00402		.00302 .00302 .00319 .00323		CY .00264 .00221 .00278		. 00219 . 00219 . 0028		. 00190 . 00229 . 00253
	BETA RUDDER 1 ORB DY	0/ 5.00	CLM .04178 .04670 .05431	00/ 5.00	CLM .03989 .0495 .05349	00.5 /0	.03698 .04283 .05200 .00000	0/ 5.00	CLM .03550 .04137 .05095	0/ 5.00	CLM . 03505 . 04080 . 05064
		/AL5.00/	.05595 .05595 .05793 .06313	" ئ	CD .05637 .05896 .06470	/AL * -5.00/	. 05796 . 06126 . 06779	AL * -5.00	CD .05852 .06238 .06957	'AL = -5.00/	CD .05859 .06265 .07025
		GRADIENT INTERVAL	CL .12236 .17199 .22755	GRADIENT INTERVAL	CL . 12325 . 17523 . 23587 . 00000	GRADIENT INTERVAL	CL .12132 .18397 .25225 .00000	GRADIENI INTERVAL	CI. . 11969 . 18963 . 26533	GRADIENT INTERVAL	CL .11932 .19085 .26983
		3.32 GRA	07 36690 29638 38358	3.30 GRA[DY -,37890 -,40109 -,39269	3.30 GRAC	07 -,37297 -,40675 -,37248 -,00000	3.30 GRAE	07 36765 36932 44889	3.29 GRAE	07 37556 37271 48330
	0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L .	000000.	FN/L =	0x 06338 07556 05904	RN/L .	10103 11109 11348	RN/L =	.03140 .14937 -11437	RN/L .	00000.
	1109.0 	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	AI, PHAC .00000 2.00000 4.00000	0 /0	ALPHAC . 95300 8 . 03000 4 . 03000
E DATA	TT. XMRP YMRP ZMRP	RUN NO.	MACH .58804 .58923 .59037	RUN NO.	MACH .58762 .58706 .58649	RUN NO.	MACH .58719 .58734 .58789	PUN NO.	MACH .58474 .59637 .00000	RUN NO.	MACH .58364 .58607 .58546 .00000
REFERENCE DATA	2690.0000 50.FT 474.8100 IN. 936.6800 IN.		AL PHAO 4.000 5.000 8.000 GRADIENT		AL PHAO 4.000 6.000 8.000 GRAD I ENT		ALPHAD 4,000 6.000 8.000 GRADIENT		ALPHAO 4.000 6.000 8.000 GRADIENT		AL PHAO 4,000 6,000 8,000 GRADIENT
	SREF LREF BREF SCALE		10.000 10.000 10.000		02 15.000 15.000		02 30.000 30.000 30.000		52 45.000 45.000		50.000 50.000 50.000 50.000

ORIGINAL PAGE IS OF POOR QUALITY

											~ M M O		+0.00
E 429	1 75)		-1.000 .000 .000 .600		CBL00108001120010700107		CBL 00131 00115 00118		CBL 00134 00122 00122		CBL 00167 00138 00122		CBL 00144 00160 00138
PAGE	1) (17 007	DATA	STAB E ELEVON E DX E	•	.00082 .00085 .00075		CYN .00093 .00085 .00072		.00082 .00082 .00067 .00067		CYN .00076 .00077 .00070		. 00071 . 00058 . 00068
	(ZNH021)	PARAMETRIC	0000	-	CY .00323 .00372 .00352		.00376 .00340 .00340 .00331		. 003557 . 003557 . 00300		CY . 00320 . 00280 . 00320		CY . 00239 . 00252 . 00283
		_	BETA REVDOER FOR IORB FOR	00'.5'/	CLM .04687 .05152 .05916	00/ 5.00	CLM . 04400 . 04896 . 05694	00/ 5.00	CLM .04231 .04784 .05608	00.5.00	CLM .04093 .04643 .05494	0/ 5.00	CLM .03787 .04401 .05315
	(ORBITER DATA)			AL = -5.00/	. 05594 . 05511 . 06061	. = -5.	. 05336 . 05532 . 05582 . 06138	*	CD . 05374 . 05628 . 00000	/AL = -5.00	CD .05453 .05748 .06357	VAL = -5.00/	CD . 05632 . 05996 . 06703
	0251			GRADIENT INTERVAL	CL .10797 .16375 .82886	GRADIENT INTERVAL	CL .10648 .16613 .22646	GRADIENT INTERVAL	.10590 .16900 .26971	GRADIENT INTERVAL	CL .11262 .17405 .2364	GRADIENT INTERVAL	CL .11378 .18482 .25452
æ	11 747/1 ATI			3.34 GRAC	. 20532 17981 15665	3.33 GRAE	. 18138 - 10900 - 14147	3.33 GRAI	07 -, 13444 -, 25685 -, 20624	3.32 GRA	DY -,19366 -,22289 -,13890	3.34 GRA	. 20571 - 24167 - 24788 - 24788
DATA - CA238	14-120(CA23B		0000 IN. X0 0000 IN. Y0 0000 IN. Z0	RN/L .	00000.	FIN/L *	0239 16238 .13195 .02309	RN/L =	DX 11657 .06359 02995	RN/L =	DX -,15742 -,06634 -,05:18	RN/L =	0x 06336 09323 04123
TABULATED SOURCE	ARC		1109.00 10.00 1375.00	0 /0	ALPHAC .00000 .00000 4.00000	0 /0	ALPHAC .00000 P.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000
TABULA		E DATA	FT. XMRP YMRP ZMRP	PCN NO.	59024 58971 58927 00000	RUN NO.	HACH .58967 .59009 .59008	RUN NO.	MACH .59902 .58974 .0000	RUN NO.	МАСН . 59003 . 59016	RUN NO	MACH . 58959 . 58978 . 58903
3 76		REFERENCE DAT	2690.0000 50.F 474.8100 IN. 936.6800 IN.		AL PHAO 4.000 6.000 8.000 6RAC : ENT		AL PHAO 4.000 6.000 8.000 GRADIENT		AL PHAO 4.000 6.000 8.000 GRADIENT		AL PHAO 4.000 6.000 8.000 GRADIENT		ALPHAO 4.000 6.000 8.000 GRADIENT
DATE 23 MAR			SREF * 26 LREF * 4 BREF * 9 SCALE *		02 3.500 3.500 3.500		02 7.500 7.500		02 10.000 10.000		02 15.000 15.000 15.000		30.000 30.000 30.000

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)E +30	(27 1)		-1.000 .000 .000 .600		CBL00131001570012300000		CBL 00131 00155 00115	٠ تر			5.000 .000 .000 .000		CBL 00124 00106 00058		CBL -, 00133 -, 00131 -, 00089
PAGE	1) (17 007	DATA	STAB ELEVON BOX		CYN .00061 .00058 .00062	•	CYN .00058 .00051 .00062	700 71 7 10	,	DATA	STAB # ELEVON # DX # MACH #		CYN .00056 .00056 .00014		CYN . 00068 . 00008
	SUHUZ	PARAMETR1C	0000.		. 00142 . 00181 . 00189		CY .00110 .00148 .00155	GRUHNE)		PARAME TR 1C	000. 000. 8.000.		CY .00245 .00330 .00340		. 00284 . 00340 . 00411
			BETA RUDDER I ORB DY	00/ 5.00	CLM .03640 .04288 .05218	00/ 5.00	CLM . 03604 . 04259 . 05191				BETA RANDOER RIORB RIORB	0/ 5.00	.05048 .05746 .07406	0/ 5.00	CLM .05834 .06582 .07196
	(ORBITER DATA)			# بې	CD . 05757 . 06166 . 06917 . 00000	ه بر	CD . 05797 . 05219 . 06981	(ORBITER DATA)				/AL # -5.00	.06744 .08789 .10211	/AL = -5.00	CD .06915 .08217 .10429
	AT1 0251 (OR			GRADIENT INTERVAL	CL :11495 :19654 :26895 :00000	GRADIENT INTERVAL	CL .11588 .20055 .27355 .00000	AT1 0251 (OR				GRADIENT INTERVAL	.31589 .38219 .45310	GRADIENT INTERVAL	CL .31793 .38278 .45956 .00000
CA23B	747/1			3.32 GRA	. 28104 - 27460 - 17509	3.32 GRAI	07 -,32597 -,26854 -,11324	1 747/1				3.31 GRAD	01217 - 22915 - 25636 - 00000	3.31 GRAD	. 11484 19164 21784 00000
DATA -	14-120(CA238)		0000 IN. YO 0000 IN. YO 0000 IN. ZO	RN/L =	0X 02796 10861 16285	FN/L =	DX 03023 18927 21103	14-120(CA23B			0000 IN. X0 0000 IN. Y0 0000 IN. Z0	RN/L	0x -,16255 -,01165 -,15636 -,00000	RN/L *	0x 18018 06165 12718
ATED SOURCE	ARC		1109.	0 %	ALPHAC . 00000 4. 00000	0 /0	ALPHAC.000000000000000000000000000000000000	ARC			# 1109.0 # 375.0	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 .000000 .000000
TABULATED		E DATA	FT. XMRP YMRP ZMRP	PUN NO.	MACH . 58957 . 58926 . 58944 . 00000	PUN NO.	MACH .58347 .58835 .58378 .00000		E DATA		TT. XMRP YMRP ZMRP	RUN NO.	MACH . 59837 . 58507 . 58491	RUN NO.	.58758 .58758 .58533 .00000
1R 76		REFERENCE DAT	2690.3300 SQ. 474.8130 IN. 936.6800 IN.		ALPHAO 4.000 5.000 8.000 GRADIENT		AL PHAO 4.000 6.000 8.000 GRADIENT		REFERENCE		2690,0000 50,7 474,8100 14, 936,6800 14,		ALPHAO 8.005 10.000 12.000 GRADIENT		ALPHAO 8.000 10.000 12.000 GRADIENT
DATE 23 MAI			SREF "LREF "BREF "SCALE "		02 45.000 45.000 45.000		50.000 50.000 50.000				SREF # CREF # CR		3.500 3.500 3.500		02 7.500 7.500 7.500

431	15 1		5.000 .000 .600		CBL 00141 00155 00115		CBL 00146 00137 00116		CBL 00153 00180 00130		CBL 00152 00149 00119		CBL 00144 00145 00124
PAGE	(17 OCT	DATA	STAB " ELEVON " DX " MACH "		.00067 .00045 .00030		.000046 .00029 00001		.000084 000084 000084		.00009 .00019 .00027		CYN .00059 .00021 00018
	(ZNH022)	PARAMETRIC D	2 000. 3 000. 8 000.		. 00334 . 00357 . 00454 . 00000		CY .00217 .00273 .00536		CY .00255 .00279 .000434		. 00206 . 00213 . 00394 . 00000		. 00229 . 00215 . 00420 . 00000
		D.	BETA RUDDER RIORB R	1 5.00	.05681 .05681 .06449 .07035	00.5 /	. 05523 . 05382 . 06382 . 06922	00.5 /0	CLM .05339 .06151 .06646	00/ 2.00	CLM . 05163 . 05985 . 06419	0/ 5.00	.05115 .05115 .05927 .06330
	TER DATA			AL5.00/	. 07039 . 08312 . 10593	AL = -5.00	CD .07053 .08369 .10736	/AL = -5,00/	CD .07139 .08539 .11276	። ሌ	CD . 07251 . 08689 . 11560	VAL = -5.00	CD .07277 .08720 .11598
	1 0251 CORBITER			GRADIENT INTERVAL	CL 72011 38290 46485 00000	GRADIENT INTERVAL	CL .31563 .38564 .46909	GRADIENT INTERVAL	CL .31691 .39233 .48784 .00000	GRADIENT INTERVAL	CL .31379 .39693 .50009	GRADIENT INTERVAL	CL .31246 .32560 .49942 .00000
œ	1 747/1 AT1			3.31 GRAD	20231 14578 16640	3.31 GRAD	. 23899 18170 20146 . 00000	3.31 GRAD	. 12441 - 12012 - 18301	3.31 GRA[07 20232 17723 17723	3.31 GPA	DY 19568 25501 16164
DATA - CA23B	14-120 (CA23B		000 IN. XO	RN/L = 3	0x 19173 07957 13358	F:N/L =	000000.	RN/L	5. 10269 07789 15887 .00000	RN/L *	0X -,03873 -,04281 -,15934 -,00000	FN'L =	0X -00133 -110600 -110600
TED SOURCE	APC		1109.0000 .0000 375.0000	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	AL PHAC .00000 2.00000 4.00000	0 0	ALPHAC .00000 2 .00000 4.00000	0 /0	AL PHAC .00000 2.00000 4.00000	0 /0 .	ALPHAC .00000 2.00000 4.000000
TABULATED		: DATA	XMRP YMRP ZMRP	RUN NO.	масн . 58709 . 58728 . 58773	RUN NO.	MACH . 58594 . 58647 . 58681	PLN NO.	. 58879 . 58879 . 58798 . 58867 . 00000	NOW THOM	7ACH . 58810 . 58849 . 58917	NON NO	MACH CBC- CBC- CBC- CBC- CBC- CBC- CBC- CB
8 76		REFERENCE DAT	590.0000 50.F 474.8100 1N. 935.6800 1N.		AL PHAO B.000 10.000 12.000 GRAD IENT		AL PHAO B.000 10.000 12.000 GRADIENT		AL PHAO 8.000 10.000 12.000 6PAD :ENT		AL PHAC 8.500 10.000 12.600 0PAD : ENT		ALPHAD B.0000 10.000 12.000 GRADIENT
DATE 23 MAR			SREF = 2 LREF = BREF = SCALE =		02 10.000 10.000 10.000		02 15.000 15.000 15.000		02 30.000 30.000 30.000		05 45.000 45.000 45.000		50.000 50.000 50.000

ARC 14-120(CA23B) 747/1 ATI 02SI (ORBITER DATA)

(ZNH023) (17 OCT 75)

!	5.000 .000 .600		CBL 00091 00101 00125		CBL 00115 00111 00138		CBL 00115 00130 00144		CBL 00112 00139 00144		CBL 00132 00138 00153
DATA	STAB ELEVON BOX		CYN . 00076 . 00068 . 00054 . 00000		CYN .00075 .00066 .00038		CYN .00073 .00066 .00041		CYN .00080 .00051 .00039	•	CYN .00071 .00062 .00029
PARAMETR1C			. 00315 . 00319 . 00360		. 00303 . 00305 . 00301 . 00000		CY .00279 .00335 .00324 .00000		CY .00285 .00271 .00322		CY .00241 .00267 .00296
	BETA # RUDDER # 10RB # DY	0/ 5.00	CLM . 05053 . 05978 . 06929	0/ 5.00	CLM .04807 .05775 .06670	0/ 5.00	CLM .04695 .05666 .06614 .00000	00/ 5.00	CLM .04558 .05661 .06487	0/ 5.00	CLM .04322 .05344 .06277
		VAL = -5.00/	CD .05552 .06581 .07670	/AL = -5.00	CD .05974 .06605 .07755	/AL = -5.00	.05996 .05996 .05637 .07819	L = -5.	CD .05052 .06735 .07934	/AL = -5.00/	CD .06172 .06920 .08321
		GRADIENT INTERVAL	CL .22257 .33357 .00000	GRADIENT INTERVAL	CL .22148 .27644 .33642	GRADIENT INTERVAL	CL .21968 .27487 .34068	GRADIENT INTERVA	CL -21864 -28273 -34368 -00000	GRADIENT INTERVAL	CL .21781 .28312 .36246
		3.31 GRA	07 26757 31779 31779	3.31 GRA	0Y 26758 21541 25423	3.31 GRA	07 -,32093 -,29826 -,31715	3.31 CRA	7 	3.31 GRA	07 - 26829 - 20880 - 26464
	0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	0X 10448 14791 09563	Fin/L *	00000	RN/L =	08080 08240 08240 08540	RN/L =	08769 08769 05553 00000	RN/L =	DX 13357 01!56 12743 .00000
	1109.000 1000 1000 1000 1000 1000 1000 1	0 /0 .	ALPHAC00000 4.0000000.	0 /0 .	ALPHAC .00000 2.00000 4.00000	0 /0 .	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .90000 2.00000 4.00000	0 / 0	AL PHAC . 00000 2. 00000 4. 00000
CE DATA	FT. XMRP YMRP ZMRP	RUN NO	MACH . 58722 . 58696 . 58675 . 00000	NO NO	MACH .58592 .58772 .58744 .00000	ON NO	MACH .58720 .58738 .58743	BN HOR	. 58987 . 584387 . 58638	PUN NO	. 58737 . 58737 . 5878 . 5878 . 00000
REFERENCE DAT	2690.0000 50 474.8100 1N 936.5930 N		ALPHAO 6.000 8.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRADIENT		AL PHAC 6.003 8.000 10.000 CHADIENT		ALPHAO 6.000 8.003 10.000 GRADIENT
	SREF = 6 LREF = 6 BREF = SCALE =		02 3.500 3.500 3.500		02 7.500 7.500 7.500		02 10.000 10.000 10.000		02 15.000 15.000 15.000		30.000 30.000 30.000

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433	1 75 1		5.000 .000 .000 .000		CBL 00141 00130 00135		CBL00126001370012500000	1 75 1		-1.000 .000 .000 .600		CBL00121001120013700000		CBL 00123 00145 00046
PAGE	3) (17 001	DATA	STAB # ELEVON # DX # MACH #		.00059 .00045 .00017		.00008 .00052 .000023	4) (17 OCT	DATA	STAB E ELEVON B DX MACH B		CYN .00075 .00071 .00042		. 00000 . 00078 . 00079 . 00009
	(ZNH023	PARAMETRIC	.000 .000 .000 .000		. 00182 . 00182 . 00191 . 00236		.00000	CZNH02	PARAMETRIC			CY .00322 .00380 .00327		.00330 .00383 .00373 .00373
			BETA RUDDER RUDD	.00/ 5.00	CLM .04193 .05219 .05099	00/ 5.00	CLM .04166 .05209 .06053			BETA = RUDDER = 10RB = DY	00/ 5.00	CLM . 05061 . 06040 . 06962	10/ 5.00	CLM .04859 .05790 .05737 .00000
	CORBITER DATA			ı,	. 00000		CD .06313 .07114 .08636	(ORBITER DATA)			" .5.	.05847 .05847 .06437 .07510	VAL = -5.00	. 05878 . 05878 . 06494 . 07630
	AT1 0251 (OR			GRADIENT INTERVAL	CL -21689 -29012 -37463	GRADIENT INTERVA	CL .21499 .29169 .37701	T1 0251 (OR			GRADIENT INTERVAL	CL .21814 .33;32 .00000	GRADIENT INTERVAL	CL . 21899 . 27358 . 33503 . 00000
88	1/247 (3.31 GRA	.31 603 31603 27867 00000	3.31 GRAI	DY 39692 35762 35684 00000	747/1 A			3.34 GRA	05439 04203 01917	3.33 GRA	DY 13760 07570 02463
DATA - CA238	14-120 (CA23B		0000 IN. YO 0000 IN. YO 0000 IN. YO	RN/L =	0x .02545 10675 15959	RN/L =	06326 12785 17777	14-120(CA23B)		00000 IN. YO	RN/L =	. 15710 15710 05661 07286	RN/L =	DX
TED SOURCE	ARC		1109.01 .0. 375.00	0 /0	ALPHAC .00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	ARC		1109.0 .0 = 375.0	0 /0	ALPHAC . 000000 . 000000 . 000000 000000	0 /0	ALPHAG 00000 4 . 00000 00000 . 000000 .
TABULATED		E DATA	TT. XMRP YMRP ZMRP	RUN NO.	MACH . 58641 . 58921 . 58901	RUN NO.	MACH . 58729 . 58809 . 58823		E DATA	FI. XMRP YMRP ZMRP	PCN NO.	MACH . 58556 . 58594 . 58738 . 00000	RUN NO.	MACH .58752 .58737 .58739
87 R		REFERENCE DAT	2690.0000 SQ.F 474.8100 IN. 936.6800 IN.		AL PHAO 6.000 8.000 10.000 GRAD IENT		AL PHAO 6.000 8.000 10.000 GRAD I ENT		REFERENCE DATA	2690.0000 SQ.1 474.8100 IN. 936.6800 IN.		AL PHAO 6.000 8.000 10.000 GRAD IENT		AL PHAO 6.000 8.000 10.000 GRAD I ENT
DATE 23 MAR			SREF = 2 LREF = 2 BREF = SCALE =		02 45.000 45.000 45.000		50.000 50.000 50.000 50.000			SREF LREF = 6 BREF = 5 SCALE = 6		02. 3.500 3.500		02 7.500 7.500 7.500

ARC 14-120(CA23B) 747/1 ATI 02SI (ORBITER DATA)

(ZNH024) (17 OCT 75)

	-1.000 .000 .000 .600		CBL00113		CBL001350013700171		CBL -,00153 -,00156 -,00171		CBL001500017000157		CBL 00166 00156 00150 00000
DATA	STAB # ELEVON # DX MACH =	•	000073 000073 000073		. 000076 . 000076 . 000046		CYN .00069 .00083		00057 .00057 .00059 .00000		CYN .00054 .00028 .00002
PARAMETRIC	000. 000. 6.000		. 00261 . 00357 . 00318		CY .00289 .00354 .00354		CY .00258 .00249 .00348		CY .00179 .00223 .00275		CY .00195 .00244 .00218
	BETA = RUDDER = 10R8 = DY	0/ 5.00	CLM .04761 .05750 .06649	00/ 5.00	04584 .04584 .05523 .06523	00/ 5.00	CLM .04353 .05389 .06301	0/ 5.00	.04202 .05242 .05242 .06077	0/ 5.00	CLM .04173 .05211 .05016
		VAL = -5.00/	CD . 05915 . 05527 . 07673	ı, Ü	CD .05977 .06595 .07805	ř. Ř	CD . 06145 . 06859 . 08238	VAL ≈ -5.00/	CD .06250 .07037 .08486	VAL = -5.00/	CD .06291 .07071 .08530
		GRADIENT INTERVAL	CL .21860 .33555 .00000	GRADIENT INTERVAL	CL .21528 .37530 .34261	GRADIENT INTERVAL	CL .21878 .28555 .36139	GRADIENT INTERVAL	CL .21643 .29153 .37290	GRADIENT INTERVAL	CL .21827 .29405 .37530
		3.33 GRA[02833 02874 07593	3.32 GRA	07 01767 02567 04641	3.34 GRAE	05168 05168 00815 04740	3.32 GRAE	07 -,05028 -,07757 -,15908	3.32 GRAD	DY -, 02820 -, 01953 -, 08646
	. 00000 IN. XO . 00000 IN. YO . 00000 IN. ZO	RN/L =	000000.	FN/L =	DX -,10235 .05297 .00557	₹N/L •	03402 03402 11321 00000	RN/L =	. 01170 . 14933 - 17441 - 00000	RN/L "	03737 - 18755 - 18855 - 13851
	1109.0 .0 . 375.0	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC . 000000	0 / 0	ALPHAC .00000 P.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000
DATA	XMRP XMRP ZMRP	RCN NO.	MACH .58782 .58743 .58754	RUN NO.	#ACH .58804 .58810 .58742	RUN NO.	XACH .58757 .58751 .58750 .00000	PUN NO.	74C+ 58586 . 58569 . 00000	RUN NO.	MACH . 58618 . 58655 . 58739
REFERENCE	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN.		AL PHAO 6.000 8.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRAD!ENT		ALPHAO 6.000 8.000 10.000 GRADIENT		ALPH4C 6.00 9.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRADIENT
	SREF # BREF # SCALE #		DZ 10.000 10.000 10.000		02 15.000 15.000		30.000 30.000 30.000		02 45.000 45.000 45.000		50.000 50.000 50.000 50.000

+35	75)		-1.000 .000 .600		CBL 00090 00100 00144		CBL 00128 00127 00130		CBL 00151 00138 00117		CBL 00166 00183 00127 .00000		CBL 00162 00148 00108
PAGE	17 001	DATA	STAB ELEVON EDX.		. 000091 . 000053 . 000017		CYN .00073 .00002 00002		CYN .00059 .00036 00015		CYN .00064 .000.24		CYN .00056 .00036 00023
	(ZNH025)	PARAMETRIC [0000.		CY .00453 .00370 .00445		CY .00380 .00456 .00456		CY .00307 .00289 .00487 .00000		CY .00369 .00410 .000410		. 00000 . 00308 . 00399 . 00000
		•	BETA = RUDDER = 10RB = DY	00'5'	. 05902 . 05701 . 07305 . 00000	7 5.00	CLM .05762 .06533 .07157	00'5'	.05658 .05384 .07046 .00000	/ 5.00	CLM .05539 .06351 .06939	00.5 7	. 05296 . 05296 . 06119 . 060834
	ITER DATA)		WE-5	-5.00	CD .06702 .08021 .09871	-5.00	CD .06765 .08342 .10134	/AL = -5.00/	. 06802 . 08043 . 10338	/AL =5.00	CD .06865 .08142 .10455	VAL = -5.00	. 07046 . 08417 . 11039
	.11 02S1 (ORBITER			GRADIENT INTERVAL	CL .31304 .33157 .4+195	GRADIENT INTERVAL	CL .31324 .37663 .44998	GRADIENT INTERVAL	CL 31397 37131 45594 00000	GRADIENT INTERVAL	CL .31176 .37832 .46087	GRADIENT INTERVAL	CL .31250 .38439 .47982 .00000
88	3) 747/1 ATI			3.34 GRAD	. 17360 17360 02214 00000	3.33 GRA[02817 02817 000034	3.33 GRA	03861 .08861 .03060	3.32 GRA	04 069 . 04 069 . 02539 02535	3.34 GRA	07 04159 01715 03594
DATA - CA23B	14-120 (CA23B)		00000 IN. XO 00000 IN. XO 00000 IN. ZO	RN/L =	0x -,09582 -,14166 -,05494 .00500	FN/L =	000000.	RN/L *	0.09040 03781 05050	RN/L =		RN/L =	DX - 13:58 - 11:340 - 17867 - 00000
TABULATED SOURCE	ABC		1109.00 .075.00	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 P.00000 4.00000	0 / 0	ALPHAC .00000 P.00000	0 / 0	ALPHAC .00000 P.00000 4.00000	0 /0	ALPHAC .00000 .00000 .00000
TABULAT		E DATA	KKRP KRRP ZKRP	RUN NO.	MACH .58688 .58953 .58754	RUN NO.	MACH .58725 .58832 .59763	RUN NO.	7ACH . 58784 . 58815 . 58774 . 00000	PUZ NO.	74CH . 56828 . 56833 . 58759	RUN NO.	MACH . 58725 . 59915 . 5984 . 00000
2 7 6		REFERENCE	30.0000 SO. 74.8100 IN. 36.6800 IN.		AL PHAO B.000 10.000 12.000 GRAD IENT		AL PHAO 9.000 10.000 12.000 GRADIENT		AL PHAO 8.000 10.000 12.000 GRAD IENT		AL PHAO B.000 10.000 12.000 GRADIENT		ALPHAO 8.000 10.000 12.000 GRADIENT
DATE 23 MAR			SREF = 26, LREF = 4, BREF = 9 SCALE =		02 3.500 3.500 3.500		02 7.500 7.500 7.500		02 10.000 10.000 10.000		DZ 15.000 15.000		02 30.000 30.000 30.000

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ARC 14-120 (CA23B) 747/1 AT1 0251 (ORBITER DATA)

n 36

PAGE

CBL - .00154 - .00160 - .00099 CBL -.00129 -.00146 -.00112 CBL -.00211 -.00255 -.00216 CBL -.00224 -.00233 -.00222 5.000 .000 .000 75 17 OCT 75 1.7 OCT CYN .00055 .00019 .00019 CYN -.00006 .00027 -.00105 CYN ..00009 ..00099 STAB ELEVON DX MACH STAB ELEVON DX MACH PARAMETRIC DATA PARAMETRIC DATA (ZNH027) (ZNH025) CY .00223 .00263 .00396 .00363 .00585 .00880 .00823 CY .00702 .00798 .00872 8.000 8.000 CY .00272 CLM .05064 .05912 .06351 CLM .04502 .05354 .06000 CLM .04262 .05100 .05605 BETA BUDDER I CLM .05122 .05944 .06403 RUDDER 1029 5.00 5.00 5.00 -5.00/ 5.00 3.29 GRADIENT INTERVAL = -5.00/ -5.00/ ARC 14-120(CA23B) 747/1 ATI 03S1 (ORBITER DATA) CD .07153 .08597 .11407 CD .05216 .06477 .08486 .07193 .08674 .11484 CD . 05214 . 06480 . 08597 . 00000 GRADIENT INTERVAL = GRADIENT INTERVAL = GRADIENT INTERVAL CL .31148 .39258 .49548 CL .31843 .38576 .46349 CL .31205 .39601 .49858 .00000 CL .31755 .38604 .45945 .01594 .01874 .00419 07994 .09838 .05239 04207 -.04207 .01766 .05471 07762 .07762 .16832 .04725 3.32 858 222 DX -.05870 -.09865 -.17449 01451 -07501 -18335 -.04747 -.1631: -.25081 -.11490 -.10494 -.14418 EN/L = 375.0000 IN. 3 RN/L = RN/L # 1109.0000 IN. .0000 IN. 375.0000 IN. ALPHAC .00000 2.00000 4.00000 0 6 0 ALPHAC .00000 R.00000 4.00000 ALPHAC . 000000 . 4. 000000 . 4. 000000 ALPHAC .00000 2.00000 4.00000 0 6 0 6 XMRP YMRP ZMRP RUN NO RUN NO XMRP YMRP ZMRP RUN NO SCN NO MACH .58850 .58832 .58778 MACH .58749 .58818 .58720 MACH .58488 .58749 .58723 MACH .58594 .58694 .58659 REFERENCE DATA REFERENCE DATA 2690,0000 SQ.FT. 474,8100 IN. 936,6800 IN. 2690.0000 SO.FT. 474.8100 IN. 935.6800 IN. ALPHAO 8.900 10.000 12.000 GRADIENT ALPHAO 8.000 10.000 12.000 GRADIENT ALPHAO 8.000 10.000 12.000 GRADIENT ALPHAO 8.000 10.000 12.000 GRADIENT 45.000 45.000 45.000 50.000 50.000 50.000 3.500 SPEF LREF BREF SCALE

ORIGINAL PAGE IS OF POOR QUALITY

437	75)		5.000	000.		CBL 00231 00206 00227 .00000		CBL 00255 00251 00225		CBL 00273 00244 00230		CBL 00264 00269 00226		CBL 00262 00250 00217 .00000
PAGE	17 001	DATA	TAR	ELEVON #	•	CYN -,00002 -,00084 -,00083		CYN 00048 00072 00121		CYN -, 00036 -, 00064 -, 00121		CYN 00052 00064 00120		CYN 00034 00063 00122
	(ZNH027)	PARAMETRIC D				. 00000		. 00000		. 00830 . 00805 . 01003		.00778 .00778 .00814 .00952		. 00815 . 00829 . 00937
		۵		BETA FRUDDER 1	/ 5.00	CLM .04051 .04892 .05287	00.5 /	CLM 03908 04773 05162	0/ 5.00	CLM . 03508 . 04392 . 04808	.00/ 5.00	CL.M . 03409 . 04334 . 04625	.00/ 5.00	CLM .03250 .04220 .04273 .00000
	TER DATA)				AL = -5.00	CD .05211 .06560 .08665	AL = -5.00	.05162 .05162 .06454 .08809	/AL = -5.00.	CD .05382 .06747 .09335	۳ ئ	CD . 05479 . 06919 . 09638	. π . · 5	CD .05489 .06938 .09742
	O3S1 (ORBITER DATA)				ENT INTERVAL	CL .3:963 .36599 .46553	GRADIENT INTERVAL	CL . 31725 . 38632 . 47178 . 00000	GRADIENT INTERVA	. 33024 . 33464 . 49110 . 00000	GRADIENT INTERVAL	.32204 .40193 .50403	GRADIENT INTERVAL	.31601 .40083 .50748
	747/1 ATI				.29 GRADIENT	08776 .08776 .04699 .06433	62.	70 . 04284 . 04109 . 04469	3.29 GRAD	07 .03346 .06309 .06846 .00000	3.30 CRAI	DY .00509 .01027 00382	3.30 GRA	04160 .05879 .07356
85040 - ATAO	ָ ט			000 IN. X0 000 IN. Y0 000 IN. Z0	RN/L = 3	. 15926 06494 07448	F.N.L = 3	0X 17151 09136 13410	" I	0X - 13749 - 10994 - 12824 - 00000	RN/L =	00000.	FN/L =	0X 04402 - 10236 - 16359
	TABULATEU SUURUE 1	•		1109.00 .00 .375.00	0 /0	40000	0 /0	48888	à	40000	0 %	ALPHAC . 00000 2.00000 4.00000	0 /0	4000
Č	TABULAT		DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH .58659 .58622 .58595	2		Q 2 0	MACH . 58635 . 58528 . 58570	ON THE	MACH . 58545 . 58504 . 58548	OZ Z	
	76		REFERENCE	2590.0000 50.F 474.8100 1N. 936.6800 1N.		AL PHAO 8.000 10.000 12.000 GRADIENT		ALPHAO 8.000 10.000 12.000 GRADIENI		ALPHAO 8.000 10.000 12.000		AL PHAO 8.000 10.000 12.000 GRAOIENI		AL PHAO 8.000 10.000 12.000 GRADIENT
	DATE 23 MAR			SREF = 26	ı	00.000 10.000 10.000		02 15.000 15.000 15.000		02 30.000 30.000 30.000		000 64 000 64 000 64		50.030 50.030 50.000

438	75)		5.000 .000 .000 .600		CBL 00197 00213 00259		CBL 00226 00256 00265		CBL 00240 00230 00276		CBL 00238 00244 00269		CBL 00270 00260 00279
PAGE	1 (17 001	DATA	STAB # ELEVON # DX # MACH #		CYN 000048 000024 000052		CYN 000047 000652 000065		CYN -,000043 -,00050 -,00071		CYN -,00056 -,00062 -,00064		CYN 00052 000946 00095
	(450HNZ)	PARAMETR1C	000.		.00872 .00923 .00915		.00901 .00857 .00859		.00867 .00861 .00851 .00000		CY .00856 .00864 .00000.		CY .00875 .00885 .00838
		_	BETA = RUDDER = 10RB = DY	00.5.00	CLM .03834 .04791 .05811	00/ 5.00	CLM .03335 .04351 .05363	00/ 5.00	CLM . 03094 . 04135 . 05189	00/ 5.00	CLM .02750 .03838 .04896	00/ 5.00	. 02487 . 03716 . 04669
	(ORBITER DATA)			VAL = -5,00,	.04049 .04658 .05678	ERVAL = -5.00	.04105 .04105 .04741 .05790	اج - ج	00000.	. = -5.	CD .04167 .04839 .05986	ų ų	CD . 04341 . 05096 . 06380
	AT1 0351 (OR			GRADIENT INTERVAL	CL .22059 .27436 .32858	GRADIENT INTER	CL .22249 .27928 .33713	GRADIENT INTERVAL	CL .22249 .27866 .34123	GRADIENT INTERVA	CL . 25 198 . 28256 . 34570	GRADIENT INTERVAL	CL .22316 .29348 .36657 .00000
38	1/24/ (3.29 GRA	07 -,01652 -,08260 -,01949	3.29 GRA[08782 04403 04800	3.29 GRAE	02445 02445 03676 06593	3.29 GRAD	07 05005 05788 07621	3.29 GRAD	DY 00569 04001 09332
DATA - CA23B	14-120(CA23B		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L #		FN/L =	0.0000.	RN/L =	DX 03950 05662 03795	: 1/N::	57 - 0894 - 05830 - 654463	PN'L *	DX 05173 .02490 07390
TED SOURCE	ARC		1109.0 0. 0. 375.0	0 /0	ALPHAC .00000 2.00000 4.00000	0 0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC . 00000 . 00000 . 000000 . 000000 . 000000	0 /0	ALPHAC .00000 .00000 .00000
TABULATED		E DATA	YMRP YMRP ZMRP	RUN NO.	MACH .58836 .58780 .58729	RUN NO.	MACH .58714 .58690 .58754	RUN NO.	MACH .58771 .58687 .58669	RUN NO.	MACH .58751 .58668 .58727 .00000	RUN NO.	MACH .58634 .58733 .58711
MAR 76		REFERENCE DAT	2690.0000 50.F 474.8100 IN. 935.6800 IN.		AL PHAO 6.000 8.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRADIENT		ALPHAO 6.000 8.000 10.000 GRADIENT		AL PHAO 6.000 8.000 10.000 GRADIENT
DATE 23 M			SREF BREF SCALE : # #		3.500 3.500 3.500		7.500 7.500 7.500		000 10.000 10.000		02 15.000 15.000		DZ 30.000 30.000 30.000

439	75)		5.000 .000 .600		CBL 00266 00266 00249		CBL 00235 00257 00267 .00000	1 75 1		5.000 .000 .000 .000		CBL002050019500200		CBL -,00214 -,00203 -,00209
PAGE	17 001	DATA	STAB # ELEVON # DX MACH #	•	CYN 00077 00069 00096		CYN 00063 00058 00083	() (17 OCT	DATA	STAB # ELEVON # DX MACH #		CYN 00010 00013 00018		CYN .00004 00002 00021
	(YEOHNZ)	PARAMETRIC	. 000 . 000 6. 000		.00782 .00811 .00797		. 00775 . 00800 . 00833	SE 0HNZ)	PARAME TR1C	000. 0000. 0000.		CY .00754 .00724 .00688		.00729 .00729 .00710 .00639
			BETA BRUDDER B	00.5 /0	CLM .02348 .03553 .04530	0/ 5.00	CLM .02306 .03528 .04512			BETA "RUDDER "IORB "	0/ 5.00	CLM . 02780 . 03437 . 04281	00/ 2.00	CLM .02242 .02937 .03810
	CORBITER DATA			L = -5.0	.04381 .05231 .05628 .00000	-5.0	CD .04419 .05249 .06693	(ORBITER DATA)			-5.0	CD .03600 .03858 .04434	. * -5,	CD .03555 .03903 .04530
	0351			GRADIENT INTERVAL	CL .25395 .378739 .37875	GRADIENT INTERVAL	CL . 22195 . 29975 . 38170 . 00000	0351			GRADIEN! INTERVAL	.11481 .17249 .23150	GRADIENT INTERVAL	CL .11820 .17817 .23795
æ	1 747/1 ATI			.30	. 05000 . 06050. . 00100.	.30	01188 -02287 -05059 -00000	3) 747/1 ATI			3.29 GRAD	05157 .05157 .10413 .03346	3.29 GRA[05294 .05716 .059716 .00000
DATA - CA238	14-120 (CA23B)		00000 IN. YO 00000 IN. YO 00000 IN. ZO	RN/L = 3	0x 01533 12592 15392 00600	F.N.L = 3	05894 - 14432 - 16747 - 00000	14-120(CA238		0000 IN. XO 0000 IN. YO 10. ZO	RN/L =	0x -,07973 -,016.08 -,03882 -,00000	RN/L =	0X -,16588 -,00436 -,00039
ED SOURCE	ARC		1109.00 * .00 * 375.00	0 /0	ALPHAC .00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	ARC		# 1109.0 # .0 # 375.0	0 /0	ALPHAC .00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000
TABULATED		E DATA	FT. XMRP YMPP ZMRP	RUN NO.	MACH .58727 .58711 .58752	RUN NO.	MACH .58796 .58812 .58765		E DATA	.FT. XMRP YMRP ZMRP	RUN NO.	MACH .58695 .58770 .58780	RUN NO.	MACH .59699 .58732 .58723
a; 9c		PEFERENCE DATA	2690,0000 SQ.F 474,8100 IN. 936,6800 IN.		AL PHAO 6.000 9.000 10.000 GRAD IENT		ALPHAO 6.000 8.000 10.000 GRAD ENT		REFERENCE DAT	2690.0000 SQ. 474.9100 IN. 936.6850 IN.		AU BHAO 4.000 8.000 8.000 GRAO I ENT		ALPHAO 6,000 8,000 8,000 0,000
DATE 23 MAR			SREF = 2 LREF = BREF = SCALE =		02 45.000 45.000 45.000		50.000 50.000 50.000			SREF * : LREF * : BREF * : SCALE *		3.500 3.500 3.500		02 7.500 7.500 7.500

ARC 14-120(CA238) 747/1 ATI 03SI (ORBITER DATA)

	0000 0000 0000		CBL -,00210 -,00216 -,00225		CBL 00239 00234 00219		CBL 00232 00230 00230		CBL 00224 00230 00244 000944		CBL 00227 00230 00248
DATA	STAB # ELEVON # DX MACH #				. 00000 - 00029 - 00016		CYN 00011 00013 00035		CYN 00036 00044 00057		CYN 00048 00063 00066
PARAMETRIC	00000		. 00704 . 00705 . 00665		. 00702 . 00669 . 00651		CY .00646 .00662 .00662		CY .00586 .00557 .00000.		CY .00566 .00511 .00536
	BETA BRUDDER BIORB BOY	00'5'	CLM .02020 .02759 .03712	00.5 /	CLM .01751 .02525 .03499	1/ 5.00	CLM .01418 .02271 .03392	00'5 /1	.01345 .02153 .02153 .03281	1/ 5.00	CLM .01327 .02131 .03226
		VAL = -5.00	.03675 .03951 .04598	VAL = -5.00/	.03745 .04068 .04725	VAL = -5.00	CD .03888 .04305 .05066	VAL = -5.00	CD . 03936 . 04460 . 05279	VAL = -5.00/	. 04016 . 04505 . 05341
		GRADIENT INTERVAL	CL .12330 .18680 .24661 .00000	GRADIENT INTERVAL	CL .12580 .19044 .25217	GRADIENT INTERVA	CL .12646 .20053 .27027	GRADIENT INTERVAL	CL .13089 .23489 .28194	GRADIENT INTERVAL	CL .13259 .20550 .28480 .00000
		3.29 GRAC	07 05589 07970	3.29 GRAE	06725 .06725 .07796 .01371	3.29 GRAE	00000.	3.30 GRAD	.10000 .04855 .00955	3.30 GRAD	08025 .05529 03100
	0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	07609 10970 000000	FN/L =	0X 17434 05427 07067	RN/L =	0x 07085 10285 16552	RN/L =	0x .04568 13136 19234	RN/L *	0x .05959 16:66 20141
	1109.0 .0 .s 375.0	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 P.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	ALPHAC .00000 2.00000 4.00000
DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH .58779 .58794 .58841 .00000	RUN NO.	MACH .58849 .58824 .58819	RUN NO.	MACH . 58969 . 58898 . 58898	RUN NO.	MACH .58293 .58837 .58880	RUN NO.	MACH . 58712 . 58810 . 58850
PEFERENCE	2590.0000 SQ.F. 474.8100 IN. 935.6800 IN.		ALPHAO 4,000 6,330 8,000 GRADIENT		ALPHAO 4.000 6.000 8.300 GRADIENT		ALPHAO 4.000 6.000 8.000 GRADIENT		AL PHAO 4.000 5.000 8.000 GRAD!ENT		AL PHAO 4.000 6.000 8.000 6RAD!ENT
	SREF LREF BREF SCALE		10.000 10.000 10.000		02 15.000 15.000		02 30.000 30.000 30.000		02 45.000 45.000 45.000		DZ 50.000 50.000 50.000

(ZNH035) (17 OCT 75)

 	(5/		5.000 .000 .000 .600		CBL 00217 00269		CBL 00225 00256 .00000		CBL 00247 00287 .00000		CBL 00240 00272 .00000		CBL 00236 00280		CBL -,00262 -,00293
PAGE	17 001	DATA	STAB # ELEVON # DX # MACH #		CYN 00062 00067		CYN 00050 00043		CYN 00019 00043		CYN 00005 00047		CYN 00021 00046 .00000		CYN -, 00040 -, 00059
	(ZNH036)	PARAMETRIC D			CY .00904 .00000		.00000 .00917		CY .00929 .00914		CY .00933 .00870		.00915 .00888 .00000		.00851 .00879 .00000
		D.	BETA * RUDDER * 10RB * DY	/ 5.00	CLM . 04804 . 05865 . 00000	/ 5.00	CLM . 04746 . 05604 . 00000	1/ 5.00	00000. 004302 005135	07 5.00	CLM . 04939 . 04939	0/ 5.00	CLM .03803 .04705 .03000	00/ 5.00	.03616 .03464 .00000
	TER DATA)			AL = -5.00/	.04740 .05814 .00000	AL = -5.00	.04901 .05820 .00000	AL = -5.00,	CD . 04957 . 05939 . 00000	-5.0	CD . 04992 . 06043	/AL = -5.00.	CD .05072 .06161	* .j.	CD .05290 .06587 .00000
	1 0351 (ORBITER			IENT INTERVAL	CL .27133 .32816 .00000	GRADIENT INTERVAL	CL .28277 .33033 .00000	GRADIENT INTERVAL	CL .29056 .34017	GRADIENT INTERVAL	CL .28988 .3+493 .03600	GRADIENT INTERVAL	CL .29245 .35126 .00000	GRADIENT INTERVAL	CL .30570 .37249 .00000
m	1 747/1 AT1			.31 GRADIENT	77.19679 . 19679 . 23177	3.31 GRAD	07 15931 16359 00000	3.30 GRAC	70 .1951 .00000	3.30 GRAC	DY .20959 .17741	3.30 GRAI	07 . 20626 . 14240 . 00200	3.29 GRA	07 . 18027 . 12485 . 00000
DATA - CA23B	4-120(CA23B)		1000 IN. X0 1000 IN. Y0 1000 IN. Z0	RN/L = 3	DX 05230 19095 00000	RN/L =	0x 13248 06137	RN/L =	00000. - 00644 - 00000.	RN/L =	0X -12131 	RN/L =	0x 03552 03300	RN/L =	0x 17838 15382 00000
SOURCE	ARC 1		1109.00 . 575. ±	361/ 0	ALPHAC 2.00000 4.00000	362/ 0	ALPHAC 2.00000 4.00000	363/ 0	ALPHAC 2.00000 4.00000	364 / 0	ALPHAC 2.00000 4.03000	. 365/ 0	ALPHAC P.00000 4.00000	365/ 0	ALPHAC 2.00000 4.00000
TABULATED		DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .58715 .58790	RUN NO.	MACH .58749 .58652	FUN NO.	MACH . 58730 . 58642 . 00000	RUN NO	MACH .58578 .58622	NON NO	MACH .58596 .58533 .00000	RUN NO	MACH . 58552 . 58513 . 00000
76		REFERENCE DAT	2690.0000 SQ.F 474.8100 IN. 936.6800 IN.		ALPHAO 7.903 10.016 GRADIENT		ALPHAO 8.096 9.922 GRADIENT		ALPHAO 8.104 9.932 GRADIENT		AL PHAO 8.096 9.970 GRAD JENT		ALPHAO B.062 9.922 GRAD1ENT		ALPHAO 8.093 9.966 GRADIENT
DATE 23 MAR			SREF = 26 BREF = 26 SCALE = 6	<u> </u>	02 8.000 8.000		02 3.500 3.500		02 7.500 7.500		02 :0:050 10:000		02 15.000 15.000		000.02 30.000

ARC 14-120(CA23B) 747/1 ATI 03SI (ORBITER DATA)

ct 75)		5.000 .000 .000		CBL 00250 00269		CBL 00237 00264		CBL 00247 00260 .00000	1 75 .		000.		CBL 00176 00210 0028
36) (17 007	4740		•	CYN 00042 00060		CYN 00028 00078		CYN 00023 00063	7) (17 OCT	A T A C			CYN 00014 00052 00052
(ZNH036)	PARAMETRIC	000.00		CY .00842 .00880 .00000		CY .00835 .00857 .00000		CY . 00814 . 00848 . 00000	(ZNH037)	PARAMETRIC	000.9		CY .00809 .00770 .00816
		BETA BUDDER I IORB	5.00/ 5.00	- FM+0	0/ 5.00	CLM .03272 .04244 .00000	0/ 5.00	333 41 00			BE 1A	0/ 5.00	. 03820 . 04954 . 05931 . 00000
(ORBITER DATA)			•	CD .05507 .06840	VAL = -5.00/	CD . 05512 . 06943 . 00000	VAL = -5.00/	CD .05561 .07011	0351 (ORDITER DATA)			'AL = -5.00/	. 00000
ATI 03S1 (ORBI			GRADIENT INTERVAL	CL .33734 .33232 .03000	GRADIENT INTERVAL	CL .30410 .38762 .00000	GRADIENT INTERVAL	CL .31216 .39004 .00000				GRADIENT INTERVAL	CL .21229 .326910 .32436 .00000
747/1			3.29 GRA	DY .16996 .15529	3.30 GRAC	DY .16650 .15991	3.30 GRAD	DY . 14432 . 13629 . 00000	3) 747/1 AT!			3.33 GRAD	. 10330 . 07589 . 06050
14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L .	DX 16773 10214	RN/L =	DX 04440 09832 .00000	RN/L	. 05197 - 05197 - 05000	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	DX 11180 08329 11084
ARC		1109.	367/ 0	ALPHAC 2.00000 4.00000	368/ 0	AL PHAC 2.00000 4.00000	369/ 0	AL PHAC 2.00000 4.00000	ARC		1109.0 10.0 10.0	371/ 0	ALPHAC .000000 .0000000000000000000000000000
	REFERENCE DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH . 58536 . 58520 . 00000	RUN NO.	MACH .58475 .58452	FOR NO.	. 58490 . 58408 . 58408		E DATA	KT. XMRP YMRP ZMRP ZMRP	RUN NO.	7.400 5.89985 5.99004 00000
	REFEREN	2690.0000 SO 474.8100 IN 936.6800 IN		ALPHAD 8.118 9.974 GRADIENT		AL PHAO 8.072 9.962 GRADIENT		AL PHAO B. 098 9. 963 GRADIENT		REFERENCE DATA	2890.0000 SG.F1 474.8160 IN. 935.6800 IN.		ALPHAO 5.775 7.930 9.942 GRADIENT
		SREF LREF BREF SCALE ::		02 45.000 45.000		02 50.000 50.000		02 60.000 60.000			SREF = 2 LREF = BREF = SCALE =		02 2.000 2.000 2.000

143	75)		-1.000 .000 .600		CBL 00206 00212 00235		CBL 00226 00239 00280		CBL 00221 00226 00274		CBL 00232 00244 00267 .00000		CBL 00247 00255 00255
PAGE	17 OCT	DATA	STAB " ELEVON # DX # MACH #		CYN .00012 00024 00025		CYN - 000012 - 000002 - 00004		CYN -,00020 -,00022 -,00043		CYN 00012 00019 00064		CYN 00023 00024 00055
	(ZNH037)	PARAMETRIC [0000.9		. 00031 . 00853 . 00873		CY .00882 .00906 .00825		CY .00862 .00784 .00803		CY .00855 .00780 .00780		.00812 .00809 .00809 .00813
		_	BEIA = RUDDER = 10RB = DY	5.00	CLM .03876 .04751 .05718	2.00	CLM .03262 .04278 .05296	/ 5.00	.03080 .04033 .05071	/ 5.00	. 03726 . 03726 . 04770	1/ 5.00	CLM . 02433 . 03502 . 04567 . 00000
	ITER DATA			AL = -5.00/	CD .04194 .04657 .05636 .00000	AL = -5.00/	CD .04178 .04715 .05782 .00000 .	AL = -5.00	. 04217 . 04730 . 05842 . 00000	/AL = -5.00,	CD . 04281 . 05951 . 05951	ERVAL = -5.00	. 00000 . 05083 . 05418 . 00000
	1 0351 (ORBITER			GRADIENT INTERVAL	CL .28978 .28819 .38421 .00000	GRADIENT INTERVAL	CL . 22874 . 32595 . 00000	GRADIENT INTERVA	CL .23251 .27349 .33806	ADIENT INTERVA	CL .23524 .27616 .34191	GRADIENT INTER	CL . 23396 . 28703 . 36445 . 00000
8	11A 1/747 (E			3.32 GRAD	07 15769 14028 13338	3.32 GRAD	70 . 134 12 . 06583	3.31 GRA	009917 12515 10589 00000	3.31 GRA	77 13277 106929 107398	3.32 CRA	. 12170 . 12609 . 08909
DATA - CA23B	14-120(CA23B		.00000 IN. XO .00000 IN. YO	NN/ N/ N/	200000 200000 869400	FN/L =	00000.	RN/L =	XQ 	# 1/NB	DX 145641, - 44440, - 50656, -	RN/L =	0X 1251 02:0 136.95
TABULATED SOURCE	ARC		1109.0 # 375.0	372/ 0	ALPHAC . 00000 2.00000 4.00000	373/ 0	ALPHAC .00000 2.00000 4.00000	374/ 0	ALPHAC .00000 2.00000 4.00000	375/ 0	AL PHAC . 90300 2.00300 4.00300	376/ 0	ALPHAC .00000 2.00000 4.00000
TABULAT		DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH .59018 .59038 .59033	RUN NO.	MACH . 58950 . 58960 . 58902 . 06ud0	RUN NO.	MACH .58846 .58936 .58870	RUN NO.	MACH .58908 .58978 .58882	RUN NO.	масн , 58881 , 58820 , 58887 , 00000
1R 76		REFERENCE DAT	2690.3000 SO.F 474.8100 IN. 936.6800 IN.		AL PHAO 6.184 7.923 9.915 GRADIENT		AL PHAO 6.130 7.940 9.945 GRADIENT		ALPHAO 6.172 7.932 9.931 GRADIENT		AL PHAO 6.191 7.927 9.914 GRADIENT		ALPHAO 6.149 7.943 9.949 GRADIENT
DATE 23 MAR			SREF LREF = ; BREF = ; SCALE =		02 3.500 3.500 3.500		02 7.500 7.500 7.500		02 10.000 10.000 10.000		02 15.000 15.000 15.000		02 30.000 30.000 30.000

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PAGE) (17 OC	DATA	STAB E ELEVON # DX MACH #		CYN 00040 00034 00071		CYN 00037 00038 00083		CYN 00054 00048 00080	1) (17 OCT	DATA	STAB FELEVON BOX MACH		. 00008 . 00078 . 00005 . 00000
	(ZNH037)	PARAME TR 1C	6.000 000.		.00809 .00809 .00804		.00760 .00781 .00759		CY .00735 .00736 .00730	(850Ht(2)	PARAMETRIC	0000.		CY .00477 .00456 .00056
			BETA "RUDDER "IORB "	00/ 5.00	CLM .02208 .03466 .0424	00.5 /0	CLM .03247 .03379 .04346	00.5 /	CLM . 02184 . 03270 . 04258			BETA RUDDER 10RB COY	00'5'/0	00141 00765 .01674 .00000
	CORBITER DATA			ı,	. 04503 . 05241 . 05667 . 00000	'AL = -5.00,	. 04549 . 05313 . 06743	'AL = -5,00.	.04584 .05369 .06817 .00000	CORBITER DATAL			AL = -5,00,	. 05245 . 05245 . 06046 . 07469
	1 0321			GRADIENT INTERVAL	CL - 22558 - 29544 - 37912 - 00000	GRADIENT INTERVAL	CL .23635 .29763 .37992	HENT INTERV	CL .23543 .29885 .36294 .00000	AT1 0351 10RB			GRADIENT INTERVAL	CL .31463 .36410 .42438 .00000
38	B) 747/1 AT			3.32 GRAC	07487 .07487 .08152 .11615	3.31 GRAE	05306 .05306 .12658 .11732	3.31 GRAD1	. 10470 . 11574 . 09894 . 00000	1747/1			3.34 GRAE	08842 . 09886 . 09314 . 00000
DATA - CA238	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	DX 06037 25014 12897	RNL =	0x 01302 23513 21663	RN/L *	DX .11953 20065 23438 .00000	14-120 (CA238		00000 IN. YO 00000 IN. YO ZO	RN/L .	DX 17966 .01417 08135
NTED SOURCE	ARC		0.00.0 0.0 375.0	377/ 0	ALPHAC .00000 2.00000 4.00000	378/ 0	ALPHAC .00000 2.00000 4.00000	379/ 0	ALPHAC .00000 2.00000 4.00000	ARC		. 375.0	381/ 0	ALPHAC .00000 .00000 .00000 .00000 .00000
TABULATED		E DATA	YMRP YMRP ZMRP	RUN NO.	MACH .58833 .58991 .58898	RUN NO.	MACH .58795 .58783 .58783	RUN NO.	MACH . 58741 . 58683 . 58754		E DATA	FT. XMRP. YMRP. ZMRP	RUN NO.	MACH . 58940 . 58902 . 58915 . 00000
MAR 76		REFERENCE	2690.0000 SO. 474.8100 IN. 936.6800 IN.		ALPHAO 6.168 7.947 9.954 GRADIENT		AL PH40 6.177 7.977 9.944 GRADIENT		ALPHAO 6.130 7.968 9.927 GRAD!ENT		PEFERENCE	2690.0000 SQ. 474.8100 IN. 936.6800 IN.		AL PHAO 6.002 7.874 9.948 GRADIENT
DATE 23 M			SREF * LREF * BREF * SCALE *		02 45.000 45.000 45.000		50.000 50.000 50.000		000 000 000 000 000 000 000			SREF # LREF # BREF # SCALE #		20 5.000 .9 0000 .000

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10 mm	1 75 1		5.000 5.000 .000		CBL 00094 00105 00142		CBL 00111 00133 00174		CBL 00121 00142 00167		CBL 00134 00152 00170		CBL 00144 00149 00169 000000
PAGE	17 001	DATA	STAB # ELEVON # DX MACH #	r	CYN . 00100 . 00099 . 00098		. 00107 . 00124 . 00111		. 00000 . 00120 . 00127		. 00123 . 00123 . 00129		. 00115 . 00115 . 00120
	8£0HNZ)	PARAMETR1C			. 00470 . 00470 . 00473 . 00000		00000000000000000000000000000000000000		00427 .00427 .00436 .00400		\$20000 \$20000 \$200		CY .00422 .00385 .00398
			BETA # RUDDER # 1088 # DY	.00/ 5.00	-,00198 -,00198 .00580 .01394	.00/ 5.00	CLM -,00803 -,00045 00906,	.00/ 5.00	CLM -,01106 -,00260 -,00574 .00000	00/ 5.00	CLM 01419 00474 .00394	00/ 5.00	CLM 01586 00679 .00141
	(ORBITER DATA)			* .	.05234 .05033 .07454 .00000	5	CD .05316 .06073 .07597	ζ- *	CD .05385 .05199 .07679	n N	CD . 05414 . 06266 . 07847	5.	CD . 05546 . 06510 . 08268
ATI 0351 (ORB			GRADIENT INTERVAL	CL 32780 .36319 .46598	GRADIENT INTERVAL	.33171 .37202 .43925 .00000	GRADIENT INTERVAL	CL .33252 .37711 .44149	DIENT INTERVAL	CL .32521 .37970 .44988	GRADIENT INTERVAL	CL .33254 .39102 .46595	
38	1/27/1			3.33 GRAI	.10119 .09433 .05269	3.33 GRA	06097 .09080 .09113	3.33 GRA	06000.	3.32 GRAD1	01898 . 01898 . 05586 . 07591	3.32 GRA	07 09200 07523 07583 00000
DATA - CA23B	14-120(CA239)		1050 IN. X0 1000 IN. Y0 1000 IN. Z0	RN/L =	0x -,19953 -,03982 -,05491	EN/L =	DX 22229 05790 03790	RN/L .	00000.	= 7/N8	78011 78010 05800	RN'L *	00000.
TED SOURCE	APC		1109.0 .0 = 375.0	392/ 0	ALPHAC . 00000 8.00000 4.00000	383/ 0	ALPHAC .00000 2.00000 4.00000	384/ 0	ALPHAC .00000 2.00000 4.00000	395/ 0	ALPHAC .00000 4.00000	386/ 0	ALPHAC .00000 7.00000 4.00000
TABULATED		E DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH .58938 .58846 .58817	RUN NO.	MACH . 58831 . 58841 . 58680	RUN NO.	.58761 .58583 .58650 .00000	RUN NO.	MACH .58577 .58613 .58605	RUN NO.	MACH .58680 .58732 .58723
AP 76		PEFERENCE DAT	2590.0000 SQ.F 474.8100 IN. 936.6900 IN.		ALPHAO 6,193 7,951 9,938 0,938		ALPHAO 6.214 7.874 9.904 GRADIENT		ALPHAO 6.221 7.924 9.923 69401531		4LPH40 6.183 7.925 9.927 GRAD:ENT		ALPHAO 6.153 7.925 9.969 GRADIENT
DATE 23 MAI			SPEF = SPEF = SCALE =		922 8.500 8.500		7.500 7.500 7.500		000.001 00.000 10.000		02 15.000 15.000		02 30.000 30.000 30.000

ARC 14-120(CA23B) 747/1 ATI 03SI (ORBITER DATA)

(ZNH038) (17 OCT 75)

001 75)		5.000 .000 .000	. 600	CBL 00138 00155	00000	CBL 00157 00169		CBC 00158	7		8.000 000 000 000	. 600	CBL 00069 00108
- 17	4	STAB ELEVON DX	# L L	. 00110 . 00110 . 00124		. 00084 . 00105 . 00109		CYN .00100 .00112 .00120	130 (13 061	DATA	STAB = ELEVON = DX		CYN .00125 .00081
(2NH038)	PARAMETRIC	. 000 . 000 . 000	000.	. 00408 . 00418 . 00352		CY . 00365 . 00374 . 00389		CY .00400 .00378 .00350	650HNZ)	PARAMETRIC	. 000 . 000 6. 000		CY .00514 .00406 .00000
_		BETA RUDDER # 10R8 #	. 00.2 .00.		_		•	CLM 018			BETA = RUCDER = 10RB = 10Y	5.00	M17 980.
ORBITER DATA			" "	CD . 05648 . 06685 . 08483	VAL = -5.00,	CD . 05641 . 05587 . 08610	VAL = -5.00.	CD . 05675 . 06738 . 07799	ORBITER DATAL			/AL = -5.00.	
A11 USSI (O			GRADIENT INTERVAL	CL . 32970 . 33258 . 47649	GRADIENT INTERVAL	CL .32762 .39648 .48261 .00000	GRADIENT INTERVAL	CL .31994 .39198 .46389	0251			IENT INTERVAL	.35168 .41699 .00000
-			3.31 GRA	. 06736 . 08859 . 03891 . 00000	3.30 GRA	74 11797 25799 .08993	3.30 GRAD	DY . 12373 . 08440 . 05094	3) 747/1 ATI			.35 GRADIENT	DY .07823 .00540
י פר שבי היי		0000 IN. YO 0000 IN. YO 0000 IN. YO	RN/L =	02 10562 05053 17347	F.N.L =	. 15610 14575 18128	RN/L =	.06113 66113 21350	14-120(CA23B)		1000 IN. YO	PN/L = 3	08042 -,08042 -,04830 .00000
?		1:09.	. 387/ 0	ALPHAC. 00000 . + .000000	399/ 0	ALPHAC .00000 4.00000	399/ 0	AL 90000 000000 000000 00000	ARC		375.09.00 375.00	3917 0	40000 40000 10000 40000 40000
	SE DATA	FT. XARO YEAP GEAS	CN NUA	MACH . 58551 . 58550 . 58500 . 00000	NO. NO.	MACH - 584.09 - 584.03 - 564.03 - 000.00	RUM NO.	MACH . 58455 . 58431 . 58414 . 00000		DATA	7. XX40 XX00 XX00	RUN NO.	MACH • 59025 • 59085 • 60000
	REFERENCE DAT	2690.0000 SQ.1 474.8100 IN. 935.6800 IN.		ALPHAO 6.149 7.962 9.550 GRADIENT		ALPHAO 6.112 7.328 9.984 GRADIENT		AL PHAO 6.088 7.843 9.583 GRADIENT		REFEREN	2590.0000 52.F 474.8100 1N. 936.6800 1N.		ALPHAO 7.8+8 9.933 GRADIENT
		SREF = LREF = BREF = SCALE =		02 45.000 45.000		50.000 50.000 50.000		50 60.000 60.000 60.000			SKEF = C		02 3.500 3.500

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TABULATED SOURCE DATA	447			5.000 5.000 .000 .500		CBL 00092 00150		CBL 00102 00131 .00000		CBL 00099 00139		CBL 00121 00150		M in C		CBL 00122 00141 .00000
TABULATED SOURCE DATA - CA238	PAGE	7	ATA		ć	CYN .00125 .00092		.00115 .00090 .00000		. 00000 . 00000 . 00000		. 00101 . 00075 . 00000		CYN .00096 .00076		CYN .00096 .00069
### 76 TABULATED SOURCE DATA - CA238 747/1 AT1 O251 (ORB1TER DATA) RETA		(50HNZ)		0000		. 00495 . 00516 . 00000		CY .00000. .00000.		.00446 .00446 .00000		.00378 .00397 .00397		CY .00363 .00423 .00000		CY .00345 .00367 .00000
FEFERICE DATA FEFERICE FEFERICE DATA FEFERICE FEFERI			à	~	Ŋ.	CLM .02273 .02979 .00000	5.0	CLM .02194 .02830 .00000	5.0	CLM .02067 .02729 .00000	/ 5.0	CLM .01825 .02536 .00000	/ 5.0	CLM .01699 .02305	5.	CLM .01649 .02232 .00000
## PEFERENCE DATA PEFERENCE DATA ARCHA 1109.0000 IN. XO 1N. YO 29.0000 IN. XO 20.0000 IN. XO				∞ ~ − △	L = -5.00	08037 .09540 .09540	L = -5.0	CD .08177 .09578 .00000		. 08268 . 09719 . 00000	-5.0	00000.	.5	CD .08613 .10378 .00000	ا = - ت ت	. 08651 . 10469 . 00000
## PEFERENCE DATA ## 2690,000 00.000 1N. XO ## 2690,000 1N.		0251			IENT INTERV	CL .36881 .4∂955 .00000		CL .37211 .42649 .00000	ENT INT	CL .37467 .43335 .00000	Z	CL .37911 .45672 .00000	DIENT INTER	CL .38512 .46284 .00000.	DIENT INTER	CL .38625 .46638 .00000
PEFERENCE DATA	œ	1/247 (¥.	06301 06301 00000	.34	70 .06157 .05457 00000.	¥.	70 05130 00000.	.33		.33 GR	00000°.	.33	7, 055986 05656 00000
ARC 1 PEFERENCE DATA PUN NO. 392/ 0 PUN NO. 392/ 0 PUN NO. 393/ 0 PUN NO. 395/ 0 PUN NO.	1	4-120(CA238		2 Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	ıt	00000. 14945 06435	н	0x 16229 08977	16	0x 20524 10508 .00000		00000.		0X - 08100 - 11160	_	0x 01490 05865
E3 MAR 76 PEFERENCE DAT 2590.0000 SQ.FT. 2690.0000 SQ.FT. 27 ALPHAO MAC 27 ALPHAO MAC 28.000 29.970 30.999 30.900 30.959 50.000 GRADIENT 00.000 GRADIENT 00.000 GRADIENT 00.0000 GRADIENT				375	95/	ALPHAC 2.00000 4.00000		ALPHAC 2.00000 4.00000	746	ALPHAC 2.00000 4.00000		ALPHAC 2.00000 4.00000	. 396/	ALPHAC 2.00000 4.00000	1262 .	ALPHAC 2.00000 4.00000
E3 MAR 76 PEFEREN E 474, 8150 10 E 3 474, 8150 10 E 3 6800 10 E 3 6800 10 C 500 8 9970 C 6801ENT C 6801ENT C 7 8 9970 C 8 098 C 9 959 C 8 018 C 9 959 C 8 016 NT TABULAI	!	DAT		RUN NO.	МАСН . 58973 . 58994 . 00000	RUN NO.	MACH .59037 .59072	FUN NO.	MACH .59084 .59115 .00000		MACH .59009 .59121	RUN NO	MACH .58969 .59111	NOR NO	MACH . 59072 . 59086	
23 MK				30,0000 SQ 74,8;00 tN 36,6800 to		AL PHAO 8.094 9.953 GRADIENT		ALPHAO 8.098 9.970 GRADIENT		ALPHAO 8.1.8 9.959 GRADIENT		ALPHAO 8.076 9.951 GRAD1ENT		ALPHAO 8.057 9.963 6RADIENT		AL PHAO B. 085 9. 989 GRADIENT
	ر بر]		pp et 14 45		02 7.500 7.500		02 10.000 10.000		88		52 30.030 30.000		വവാവ		50.000 50.000 50.000

APC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA)

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(17 OCT

(DHOHNZ)

CBL -.000**51** -.000**58** -.000**64** CBL -.00094 -.00073 -.00071 CBL -.00098 -.00082 -.00086 CBL -.001:7 -.00083 -.00077 CBL -.00138 -.00117 -.00096 CYN .00132 .00120 .00117 CYN .00124 .00118 .00111 CYN .00124 .00113 .00101 CYN .00139 .00127 .00113 STAB ELEVON DX MACH PARAMETRIC DATA CY .00411 .00360 .00359 CY .00355 .00333 .00304 CY .00474 .00394 .00375 .00381 .00381 .00409 CY .00338 .00371 .00284 .00000 90000 CLM .01029 .01648 .02393 CLM .00566 .01244 .02025 CLM .00091 .00916 .01713 CLM .00698 .01303 .02095 CLM .00327 .01102 .01936 BETA RUDDER 1089 5.00 5.00 5.00 5.00 GRADIENT INTERVAL = -5.00/ GRADIENT INTERVAL = -5.00/ 3.32 GRADIENT INTERVAL = -5.00/ 3.32 GRADIENT INTERVAL = -5.00/ 3.33 SRADIENT INTERVAL = -5.00/ CD .06261 .06750 .07554 CD .06332 .06848 .07652 CD .06365 .06899 .07726 CD .06428 .06991 .07868 CD . 06592 . 07235 . 08213 CL .19530 .25363 .30964 .00000 CL .19764 .27406 .34062 CL .20017 .25620 .31376 CL .20124 .26063 .31865 CL .19642 .26420 .32640 .00000 .01407 .08346 -.00542 -.02533 .08607 .00618 -.02923 -.05011 -.06713 3.32 222 .03191 -.03191 -.01566 -.06186 DX -.06427 -.05303 -.06491 0X -.11834 .04835 -.09299 Dx -.10009 -.05271 -.09386 CX -.08259 -.05371 -.03650 RN/L = 375.0000 IN. = 1/No - J/N/C ALPHAC .00000 R.00000 4.00000 ALPHAC .00000 2.00000 4.00000 0 6 6 o 6 ALPHAC .00000 P.00000 4.00000 0 6 At PHANCO (1900) 0 6 ALPHAC . 00000 4. 00000 RUN NO. BUN NO. RCN NO. PCN NO RUN NO. MACH .58585 .58731 .58671 .00000 MACH .58556 .58679 .58753 MACH :58574 :58678 :58737 :00000 MACH .58538 .58728 .58751 .00000 MACH .58568 .58780 .53718 REFERENCE DATA SO. Z. ALPHAO 4.000 6.000 8.000 GRADIENT AL PHAO 4.000 6.000 8.000 GRADIENT ALPHAO 4.000 6.000 8.000 GRADIENT 2690.0000 474.8100 936.6800 ALPHAO 4.030 6.000 8.000 GRADIENT ALPHAO 4.000 6.000 8.000 GRADIENT 3.500 3.500 3.500 02 7.500 7.500 7.500 30.000 30.000 30.000 30.000 02 15.000 15.000 SREF LREF BREF SCALE

6 4 4 6 6 7 7 5 7 1 2 5 7		5,000 5,000 600 600		CBL -,00126 -,00103 -,00104		CBL -,00119 -,00092 -,00102	(57)		8.000 8.000 000 000 000		CBL 00131 00094 .00000		CBL 00103 00074
PAGE	DATA	STAB " ELEVON " DX " MACH "		. 00117 . 00117 . 00098 . 00000		CYN . 00013 . 00099 . 00095)) (17 OGT	DATA	STAB = ELEVON = DX = MACH =		CYN .00036 00019		CYN .00043 00027
(0+0HNZ)	PARAMETRIC [0000.7		. 00308 . 00294 . 00294 . 00290		. 00273 . 00248 . 00288	(ZNHX10)	PARAMETRIC	0000.8		CY .00398 .00498		CY .00387 .00512 .00000
	α.	BETA BRUDDER BIORB BIORB	2.00	00007 .00771 .01633	7 5.00	00040 00040 .00714 .01615		_	BETA = RUDDER = 10RB = DY	0/ 5.00	CLM .02805 .03351 .00000	0/ 5.00	.02638 .03155 .03000
TER DATA)			15.00/	00000.	AL = -5.00/	00 06727 068545 00000	(CRBITER DATA)			-5.0	.10035 .12518 .00000	VAL # -5.00	. 10188 . 10184 . 12784
0251 (ORBITER			GRADIENT INTERVAL	CL . 19818 . 27535 . 35505 . 00000	IENT INTERVA	CL 19802 .27643 .36162	0251			GRADIENT INTERVAL	CL .46515 .53909 .00000	GRADIENT INTERVAL	CL .46971 .54571 .00000
747/1 ATI			.33 GRAD	70 .07788 .00303 04890	. 32 GRADIENT	0714. .0714. .02607. 05982.	11 747/1 ATI			3.34 GRAC	70 .69102 .65567	3.34 GRAI	07 .10196 .12026
DATA - CA23B		0000 IN. X0 0000 IN. Y0 0000 IN. Z0	RN/L = 3	03619 12600 16483	RN/L = 3	0x .11191 22841 18856	14-120(CA23B)		0000 IN. X0	RN/L =	00000°.	RN/L =	xa 00000. 00000.
TABULATED SOURCE		00.2011 = 00.00	0 /0	ALPHAC .00000 2.00000 4.00000	0 /0	¥0000	A RC		0.011 = 0.09.0 0. = 375.0	0 /0	ALPHAC 2,00000 4,00000	0 / 0	ALPHAC 2.00000 4.000000
TABULAT	DATA C	T, XRRP YRRP Z <pp< td=""><td>CK NOW</td><td>MACH . 58585 . 58785 . 58685 . 60000</td><td>S S S S S S S S S S S S S S S S S S S</td><td>MA</td><td></td><td>A 1 A C</td><td></td><td>2 2 2 2</td><td>2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</td><td>OH NO</td><td>E</td></pp<>	CK NOW	MACH . 58585 . 58785 . 58685 . 60000	S S S S S S S S S S S S S S S S S S S	MA		A 1 A C		2 2 2 2	2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	OH NO	E
s 76	BITTERENCE DATA	2690.0000 SC.F 474.91C3 IN. 938.6803 IN.		AL PHAO 4,000 6,000 8,000 GRADIENT		ALPHAO 4.000 6.000 8.000 GRADIENT		ATAC TOMOGRAPHS	2690.0000 SO.1 474.8100 IN. 936.6800 IN.		AL PHAO 16.000 12.000 GRAD 1ENT		ALPHAO 15.000 12.000 GRADIENT
DATE 23 MAR		SREF = 20 LREF = 20 SCALE = 1		02 45.000 45.000		50.000 50.000 50.000			SREF # C		02 3.500 3.500		02 7.500 7.500

ARC 14-120(CA23B) 747/1 ATI 02SI (ORBITER DATA)

(ZNHX10) (17 OCT 75)

ر د د		5.000 .000 .500		CBL 00074 00049		CBL 00104 00087 .00000		CBL 00104 00073		CBL 00078 00086		CBL 00086 00074 .00000
120 / 1 / 00	DATA	STAB ELEVON BOX		CYN . 00054 00032		CYN .00034 00037		CYN .00016 .000044		CYN . 00019 00036		CYN .00020 00037
(D XHN7)	PARAMETR1C	000. 000. 000. 000.		CY .00393 .00531		CY .00319 .00487		CY .00339 .00398		CY .00348 .00381		CY .00349 .00393
		BETA R RUDDER = IORB = DY =	0/ 5.00	CLM .02517 .03017	0/ 5.00	CLM .02375 .02850	0/ 5.00	CLM .02149 .02571 .00000	5.00	CLM .02015 .02371	1/ 5.00	CLM .01930 .02313
			VAL = -5.00/	CD .10252 .12980 .00003	VAL = -5.00/	CD .10331 .13148	/AL = -5.00/	CD .10651 .13663 .00000	/AL = -5.00/	CD . 10835 . 13985	/AL = -5.00/	CD .10811 .14069 .00000
			GRADIENT INTERVAL	CL .47085 .55367 .00000	GRADIENT INTERVAL	CL .47128 .55523 .00000	GRADIENT INTERVAL	CL .48255 .57398 .00000	GRADIENT INTERVAL	CL .49079 .58572 .00000	GRADIENT INTERVAL	00000. 21885. 200000.
•			3.33 GRA	DY -,40753 -,29938	3.35 GRA	7808 -,37808 -,4;522	3.35 GRA	70 84774 90000.	3.35 GRAD	DX - 43160 43800 00000	3.35 GRAD	70 48407 53399 .00000
		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	00000 .	RN/L =	00000 · 00000	RN/L =	00000 ·	RN/L =	000000 0000000	RN/L =	00000 00000 00000
		1109.	0 %	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00500 4.00000	0 /0	AL PHAC 2.00000 4.00000	0 /0	ALPHAC 7.00000 4.000000	0 /0	ALPHAC 2.00050 4.00000
	SE DATA	50.F1. XMRP IN. YMRP IN. ZMRP	RUN NO.	. 59778 . 59813 . 00000	RUN NO	MACH .59647 .59743	FON NO.	MACH .59550 .59596 .00000	RUN NO.	MACH .59532 .59524 .00000	RUN NO.	MACH .59473 .59448
	PEFERENCE DATA	00 00 00 00 00 00 00 00 00 00 00 00 00		ALPHAO 101.000 121.000 6540:541		ALPHAO 10.000 12.000 12.000		AL PHAO 10.000 12.000 6RAD:ENT		AL DE BERTO		ALPHAO 19.009 12.000 GRADIENT
		OREF TREF SCALE	02 10.000 10.000			02 15.000 15.000	02 30.000 30.000			02 45.000 45.000		50.000 50.000

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£5.	. 75 .		υν. 000. 000. 000. 000.		CBL 00047 00000		CBL 00060 00058		CBL 00070 00072		CBL 00073 00085		CBL 00097 00097		CBL 00087 00080
PAGE	17 001	DATA	STAB ELEVON BOX MACH BOX		. 00104 . 00000 . 00000		CYN .00103 .00077 .00000		CYN .00094 .00072		CYN ,00091 ,00063		CYN .00000.		. 00084 . 00084 . 000050
	(ZNHX 13)	PARAMETRIC D			CY .00299 .00000.		CY .00242 .00000		CY .00192 .00252 .00000		CY .00191 .00229		. 00000		. 00000 . 00000
		Φ.	BETA BRUDDER BRUDDER BRUDDER BRUDDER BRUDDER BRUDDY	2.00	.02502 .03215 .00000	/ 5.00	CLM . 02239 . 02926 . 000 0 0	00.5 //	CLM .02177 .02847 .00000	00.5 /0	CLM .02009 .02584 .00000	00'5'/0	CLM .91840 .02463 .00000	00' 2'00	01709 .01709 .02281 .00000
	TER DATA)		a e 0	\L = -5.00\	CD .08031 .09464 .00000	AL * -5.00/	. 08068 . 09594 . 00000	AL = -5.00	. 08081 . 09635 . 00000	AL = -5.00/	CD . 08215 . 09784 . 00000	AL = -5.00/	00000. 10152 00000.	/AL = -5.00	00000.
	O251 (ORBITER			GRADIENT INTERVAL	CL .35181 .41338 .00300	IENT INTERVAL	CL .35263 .42017 .00000	GRADIENT INTERVAL	CL .35382 .42216 .00000	HENT INTERVAL	CL . 35/367 . 42/305 . 00.00.	GRADIENT INTERVAL	CL .36544 .44346 .00000	GRADIENT INTERVAL	CL .36940 .45356 .09030
œ	747/1 AT1			3.34 GRAD	7. -, 50809 -, 50809	3.34 GRADIENT	70 47674 49008	3.33 GRAD	7.7 58964 58369	3.35 GRAD1	784887. - 18688. - 18683.	3.35 GRA(07 -,52819 -,50328	3.35 GAA	77 77 78 78 78 78 78 78 78 78 78 78 78 7
DATA - CA239	14-120(CA238)		000 IN. XO 000 IN. YO 000 IN. ZO	RN/L = 3	XQ 00000 000000.	RN/L *	00000°.	RN/L =	00000 00000 xa	RN/L =	00000 00000 xa	P11/L =	00000°.	RN/L =	XQ 00000. 00000.
ED SOURCE	ARC		1109.0000 1 .0000 275.000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	AL FHAC 2.00000 4.00000	0 '0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000
TABULATED		E DATA	_ <u>.</u>	RUN NO.	MACH .59463 .59358	RUN NO.	MACH .59270 .59228 .00000	FON NO.	MACH .59175 .59204 .00000	RUN NO.	MACH .59106 .00000	RUN NO	MACH .59039 .59057	RUN NO	MACH . 59084 . 53105 . 00000
76		REFERENCE	95.		AL PHAO 8.000 10.000 6=AD!ENT		ALPHAO 8.000 10.000 GRAD:ENT		ALPHAO 8.000 10.000 0PADIENT		ALPHAO 8,000 10,000 08ACIENT		ALPHAO 8.000 10.000 6PAD:ENT		ALPHA0 8.000 10.000 6820ENT
ATE 23 MAG	}		SREF = 26 SREF = 4 SREF = 9		3.500 3.500		02 7.500 7.500		DZ 10.000 10.000		02 15,000 15,000		02 30.000 30.000		02 45.000 45.000

PAGE

17 001 STAB ELEVON PARAMETRIC DATA (2NHX13) ARC 14-120(CA238) 747/1 ATI 0251 (ORBITER DATA) 222 REFERENCE DATA

CBL .00022 .00040 CBL -,00050 -,00053 CBL -.00063 -.00057 CBL -.00050 -.00069 .00000 5.000 (17 001 75) CYN .00089 .00053 CYN .00111 .00085 CYN .00104 .000075 CYN .00118 .00093 CYN .00098 .00080 STAB ELEVON : DX MACH :: PARAMETRIC DATA (5 NHX 1 t) .00136 .00217 .00000 .00208 .00195 CY .00205 .00207 .00000 .00100 .00148 .00000 .00126 .00177 .00000 6.000 6.000 6.000 CLM .01631 .02208 .00000 CLM .01978 .02449 .00000 BETA RUDDER RITORB RITORB CLM .02167 .02712 .00000 CLM .01852 .02358 .00000 CLM .01731 .02245 BETA RUCDER 1 1098 5.00 5.00 5.00 5.00 -5.00/ GRADIENT INTERVAL - -5.00/ GRADIENT INTERVAL = -5.007 -€.00/ -5.00/ ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA) CD .08642 .10522 .00000 08019 .0345C .0345C CD . 08078 . 99590 . 00000 CD .08099 .09646 .08218 .09835 .00000 GRADIENT INTERVAL -GRADIENT 'NTERVAL GRADIENT INTERVAL CL .37026 .45859 .00000 CL .34991 .40591 .00000 CL .35480 .41642 .00000 .41762 CL .35646 .42507 .00000 -.51807 -.55625 .00000 -.60**672** -.62422 .00000 -.57802 -.57676 -.00000 0Y -.65106 -.62205 .00000 -.5531**8** -.65905 .00000 3.34 3.35 1109.0000 IN. XO .0000 IN. YO 375.0000 IN. ZO . 00000 . 00000 . 00000 000000 10.00000 10.00000 00000.01 DX 10.00000 10.00000 000000 10.00000 10.00000 = 1109.0000 IN. = .0000 IN. = 375.0000 IN. PN/L = EN/L = RN/L * AL PHAC 2.00000 4.00000 6 ALPHAC 2.00000 4.000000 ALPHAC P.00000 4.000000 AL PHAC P. 00000 4. 00000 ALPHAC 2.00000 4.00000 ဝ ò PCN NO. 7.4.4.7 4.4.7.7 4.8.7.9.9 4.8.7.9.9 RUN NO BUN NO RUN NO RUN NO. MACH .58959 .58965 .00000 MACH .58921 .58810 .00000 MACH .59149 .59137 .00000 MACH .59102 .5903: REFERENCE DATA 2690,0000 SO.FT. 474.8100 IN. 936.6800 IN. 2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN. ALPHAO 8.000 10.000 GRADIENT AL PHAO 8.00 10.000 GRADIENT ALPHAO 8.000 10.000 GRADIENT ALPHAO 8.000 10.000 GRADIENT ALPHAO 8.000 10.000 GRADIENT 50.000 50.000 50.000 02 3.500 3.500 02 7.500 7.500 02 10.000 10.000 02 15.000 15.000 SREF = LREF = GREF = SCALE =

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					083 095 000		.00000		CBL 00068 00061	•		0000		CBL .00057 .00004 .00000		CBL 00055 00021
 453	75)		5.000 5.000 10.000		CBL 00083 00095 .00000		CBL 0907(0007)			37 TS		2000 2000		80°.		CB
PAGE	1 (17 001	DATA	STAB # ELEVON # OX # MACH #		CYN .00095 .00057		. 00105 . 00048 . 00000		CYN .00074 .00048	5) (17.00	DATA	STAB = ELEYON = DX MACH =		CYN .00085 .00000.		CYN .00077 .00011
	FIXHNZ)	ARAMETRIC	000 9.000 9.000		.00000 .00000		CY .00132 .00124		. 00000 . 00000	(ZMNZ)	PARAME TRIC	0000.8		CY .03167 .00048		.00250 .00452 .00000
		Q	BETA = RUDDER = 10R9 = DY	1/ 5.00	CLM .01610 .02142	00.5.70	CLM .01521 .02053	0/ 5.00	CLM .01545 .02536 .00000			BETA RUDDER = TORB = DY	00/ 5.00	770 00030 00000	00/ 5.00	CLN .02373 .0835 .00000
	ITER DATA			AL # -5.00.	00000. . 10198 . 00000	AL = -5.00	. 00000 . 00000	-5.0	00800. 10491. 00000.	(ORBITER DATA)			, J	CD .09745 .15159	L = -5.	. 10012 . 12476 . 00000
	O251 (ORBITER			ENT INTERVAL	CL .35731 .44515 .00000	DIENT INTERVAL	CL .36993 .45985 .00000	GRADIENT INTERVAL	CL .37487 .45962 .00000	0251			GRADIENT INTERVAL	CL .45294 .52051 .00000	GRADIENT INTERVA	Cl. .46011 .53240 .00000
	747/1 AT1			.35 GRADIENT	07 54427 55315	.35 GRA	0Y 58631 62227 .00000	.35	7745 57745 62433 .00000	39) 747/1 AT1			3.34 GRA	07 -,59402 -,65242	3.34 GRA	0Y 66536 55825 .00000
DATA - CA238	4-120(CA23B)		00 IN. X0 00 IN. X0 00 IN. X0	RN/L = 3	00000.	RN/L = 3	00000.01	RN/L = 3	000000 10.00000 10.00000	14-120(CA23E		900 IN. X0	P:4/L =	000000 000000 000000000000000000000000	FN/L =	200 200 200 200 200 200 200 200 200 200
ED SOURCE	ARC 1		. 375.0000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 / 0	ALPHAC 2.00000 4.00000	ARC		1109.0000 0000. 375.0000	0 /0	ALPHAC 2.00003 4.00000	0 / 0	ALPHAC 2.00000 4.00000
TABULATED		DATA	7. XMRP YMRP ZARP ZARP	RUN NO.	MACH .58818 .59074 .00000	RUN NO.	MACH .59228 .59176	S SO	MACH .59041 .59056 .00000		E DATA	7 XX	RUN NO	MACH .59219 .58993 .0000	RUN NO	МА СН . 5 9002 . 5894 . 00000
7. 76		REFERENCE DATA	2690.0000 SQ.F 474.8100 IN. 936.6800 IN.		ALPHAO 8.000 10.000 GRADIENT		AL PHAO B. 000 10.000 GRAD1ENT		AL PHAO 8.000 10.000 GRADIENT		REFERENCE DAT	2690.0000 50.FT 474.8100 IN. 936.6900 IN.		ALPHAO 10.000 12.000 GRAD1ENT		ALPHAO 10.000 12.000 GRAD1ENT
ATAC FG PTAC)		SREF LREF BREF SCALE		22 30.000 30.000		DZ 45.000 45.000	<u></u>	50.000 50.000	······································		Q, _, Q,		02 3.500 3.500		02 7.500 7.500

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

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(17 OCT

(2NHX15)

CBL -.00078 -.00034 .000000 CBL -.00093 -.00046 CBL -.00069 -.00026 CBL -.00055 -.00045 CBL .00077 .00033 5.000 CYN .00027 .00033 CYN .00024 .00016 CYN .00055 -.00022 . 000043 -.00023 -.000003 CYN .00073 .00004 STAB ELEVON DX MACH PARAMETHIC DATA CY .00260 .00350 CY .00310 .00466 .00000 .00237 .00412 .00697 CLM .02318 .02753 .00000 CLM .02043 .02408 .90003 .01937 .02294 .00000 CLM .02199 .02511 .00000 CLM . 91921 . 02237 . 00000 5.00 5.00 5.00 5.00 BETA RUDDER 1 IORB 1 5.00 -5.00/ 3.35 GRADIENT INTERVAL * -5.00/ GRADIENT INTERVAL = -5.007 GRADIENT INTERVAL = -5.007 3.35 GRADIENT INTERVAL = -5.007 CD .10727 .13667 .000000 .10181 .12690 .00000 CD .10294 .12972 .00000 .10668 .13578 CD .10805 .13971 .00000 GRADIENT INTERVAL . CL ,46843 ,55090 ,00000 CL .48493 .56316 .00000 . 54071 . 54071 CL .48374 .57239 .00000 CL .48903 .58875 .00000 -.69918 -.64470 -.73661 DY -.59283 -.65031 -.70121 -.69625 .00000 DY -.71338 -.67087 .00000. 3.35 3.35 3,33 858 0X 10.00000 10.00000 10.00000 10.00000 000000.01 000000.01 10.00000 10.00500 10.00500 0X 10.00.00 10.00000 375,0000 1V. X RN/: = RN/L = R::/L = 51/F RN/L = AL PHAC 2.00000 4.00000 ALPHAC 2.00000 4.00000 ALPHAC 2.00000 4.00000 AL PHAC 2.00000 4.000000 o 6 ALPHAC 2.00300 4.00000 o 6 0 6 0 /0 0 6 XMRP YMRP ZMRP PUN NO. PUN NO. FON NO. PCN NO. NO NO MACH .58823 .58598 .00000 MACH .58995 .58955 MACH .58891 .58894 .00000 .5891**5** .5907**3** MACH .58887 .58933 .00000 MACH REFERENCE DATA S0.FT. IN. ALPHAO 10.000 12.000 GRADIENT ALPHAO 10.000 12.000 GRADIENT ALPHAO 10.000 12.000 GRADIENT ALPHAO 10.000 12.000 GRADIENT 2690,0000 9 474,8100 1 938,5800 1 AL PHAO 10.000 12.000 GRADIENT 02 10.900 10.000 52 30.000 30.000 92 45.966 45.368 50.600 50.000 50.000 02 15.000 15.000

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455 75 }		5.000 5.000 20.000 .600		CBL 00046 00053 .00000		CBL 00065 00076		CBL 00071 00080		CBL 00078 00099		CBL 00113 00095		CBL 00089 00104 .00000
PAGE (17 OCT	DATA	STAB * ELEVON * DX * A	ľ	. 00000		. 00000 . 00096 . 00000		CYN .00108 .00083		CYN .00106 .00072		CYN .00097 .00065		CYN .00090 .00052
(2NHX16)	PARAMETRIC D			CY .00291 .00335		.00000 .00366 .00000		. 00272 . 00338 . 00000		CY .00279 .00000.		. 000279 . 00288 . 00000		CY .00211 .00299
	α.	BETA = RUDDER = 10RB = 0Y	5.00	CLM .01698 .02124 .00000	5.00	CLM .01448 .01862 .00000	00.5 /	CLM .01372 .01794 .00000	/ 5.00	.00000	00.5	CLM .01349 .01817	07 5.00	CLN . C1364 . 01850 . D0000
(ORBITER DATA)		m	AL = -5.00/	CD . 09739 . 00000	AL = -5.00/	08298 . 09809 . 00000	AL = -5.00	CD .08296 .09845	/AL = -5.00	CD .08323 .09923 .00001	/AL = -5.00	CD .08464 .10245 .00000	L = +5.0	CD . 09576 . 10466
0251			IENT INTERVAL	CL .34968 .40712	IENT INTERVAL	CL .35427 .41535 .00000	GRADIENT INTERVAL	CL .35410 .41651 .00000	GRADIENT INTERV	CL .35879 .42530 .00000	GRADIENT INTERVA	CL .36767 .44313 .00000	GRADIENT INTERVA	CL .37231 .45662 .00000
B 747/1 AT1			GRADIENT		3.34 GRADIENT	DY 81185 81231 .00000	3.33 GRAD	. 76413 80148 00000	3.35 GRAD	84082 75321 30000	3.35 GRAI	DY 80629 850 63	3,35 GRA	27 35331 75077
DATA - CA23B		1000 IN. XO 1000 IN. YO 1000 IN. YO	- 1/Na	0x 000000 0000000000000000000000000000	RN/L =	20.0000 20.00000 20.00000.	RN/L	00000 . 05 00000 . 05	PN/L =	PX PO : 09000 E0 : 09000	RN/: =	20.00000 20.000000 20.000000	BRIVE a	200000 . 000000 . 000000 .
لما		375.25	à	∢000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.000000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000
TABULATED SOURC	. DATA	XMRP YMRP ZMRP	<u>9</u>	•	RUN NO.	MACH .58931 .58946 .00000	FICH NO.	MACH .59013 .58931	RUN NO.	MACH .58937 .58930 .00000	RUN NO.	MACH .59004 .00000	RUN NO.	MACH . 58948 . 58970 . 00000
76	BEEFBENCE DAT	2690.0000 SQ.F 474.8100 IN. 936.6800 IN.	.0125	ALPHAO 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT		ALPHAO B.000 10.000 GRADIENT		AL PHAO 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT
JATE 23 MAR		3.2 H H H B B B B B B B B B B B B B B B B		02 3.500 3.500		02 7.500 7.500		DZ 10.000 10.000		02 (5.000 (5.000		02 30.000 30.000		05 45.000 45.000

76	
AAR	
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DATE	
n	

(57 T		5.000 5.000 20.000		CBL 00085 00096	T 75)		5.000 5.000 20.000 .600		CBL 00121 00015		CBL 00101 00042		CBL 00084 00062		CBL 00120 00075
(17	DATA	STAB # ELEVON # DX = MACH #		CYN . 00094 . 00051	(17	DATA	STAB * ELEVON # DX #		CYN .00074 .00017		CYN .00070 .00002		. 00070 . 00010 . 00000		CYN .00059 00015
(ZNHX18	PARAME TRIC	000. 000. 000.9		CY .00212 .00307	CIXHNZI	PARAMETRIC	000.8		CY .00239 .00624		CY .00356 .00559		CY . 004 32 . 00503		CY .00455 .00520 .00000
		BETA REUDDER RUDDER RUD	0/ 5.00	CLM .01354 .01839			BETA = RUDDER = 1 ORB = DY	0/ 5.00	CLM .02216 .02540 .00000	0/ 5.00	00000°.	0/ 5.00	CLM .01592 .02307 .00000	0/ 5.00	CLM .01893 .02194 .00000
			. π -5	CD . 08622 . 10518	BITER DATA)			# C	CD . 09892 . 12380 . 00000	il	CD . 10149 . 12550 . 00000	AL = -5.	. 10316 . 12675 . 00000		CD , 10350 , 12819 , 00000
0251				CL .37213 .45747 .00000	11 0251			DIENT INTER	CL .44996 .52070 .00000		CL .45714 .52373 .00000		CL . 46244 . 53488 . 00000		C1, ,45358 ,54052 ,00000
1747/1			3.35 GRA	80299 77864 00000	1/24/			3.34 GRA	DY -,53583 -,91880 .00000	±₩.	71654 -,71654 -,86406	.33	0Y 82520 81252 .00000	.35	DY -,83998 -,83206 ,00000,
14-120(CA23		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L .	DX 20.00000 20.00000	14-120(0423		000 IN. XO 000 IN. YO 000 IN. ZO	RN/L =	DX 20.00000 20.00000	RN/L =	20,00000 20,000000 30,00000	RN/L *	DX 20.00000 20.00000	RN/L =	DX 20.00000 20.00000 .00000
ARC		= 1109. = 375.	0 /0	ALPHAC 2.00000 4.00000	ARC		0.011 = 0.09.0 = 0	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 7.00000 4.00000
	E CATA	· -	RUN NO.	*ACH . 59897 . 58896 . 00000		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	38981 . 58981 . 58935	PUN NO.	*	RUN NO.	MACH . 59142 . 59107 . 00000	PUN NO.	MACH . 59121 . 59220 . 00000
	DREADER	0 Z Z		ALPHAO B.000 10.000 GRADIENT		REFERENC	8100 8100 6800		ALPHAC 10.050 12.050 GPAD :ENT		AL PHAG 10.003 12.000 GRADIENT		ALPHAO 10.000 :2.900 GRADIENT		AL PHAO 10.009 12.000 GRADIEN*
				02 50.000 50.000			SREF = 5 LREF = 5 JREF = SCALE =		02 3.500 3.500		02 7.503 7.500		02 10.000 10.000		02 15.000 15.000
	C 14-120(CA238) 747/1 ATI 0251 (ORBITER DATA)	ARC 14-120(CA238) 747/1 ATI 0251 (ORBITER DATA) (ZNHX15) (17 OCT 7 PEFEPENCE DATA) PARAMETRIC DATA	ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA) (ZNHXIB) (17 OCT PEFEPENCE CATA 2690.0000 SQ.FT. XMRP = 1109.00000 IN. XO BETA = .000 STAB = .474.8100 IN. YO ELEVON = .6000 DX = .6000	### PEFEPENCE CATA #### PEFEPENCE CATA ##################################	### PEFEPENCE CATA ### PEFEPENCE CATA ### PEFEPENCE CATA ### PEFEPENCE CATA #### PEFEPENCE CATA #### PARAMETRIC DATA ### PARAMETRIC DATA #### PARAMETRIC DATA #### PARAMETRIC DATA ### PARAMETRIC DATA #### PARAMETRIC DATA #### PARAMETRIC DATA ### PARA	## PEFEPENCE CATA ## PARAMETRIC DATA ## PARA	### PEFEPENCE CATA ### PARAMETRIC DATA ### PA	PEFEPNCE DATA PARAMETRIC D	### PEFEPTIVE CATA ### PEFETIVE CAT	### PRINTERINGE DATA Parametric Data Parametric	Peterpeyce Data Parameter Data Par	Peterpone Pete	Peterence Data Paterence Data Pate	Peterence California Paterence Pat	

157	. 27		5.000 25.000 .600		CBL 00103 00084 .00000		CBL -, 00088 -, 00089		CBL 00089 00078	1 75)		5.000 .000 .600		CBL 00254 00218		CBL 00233 00223
PAGE	(17 OCT	DATA	STAB = ELEVON = DX = MACH =		CYN .00053 00008		. 00000 . 00033		CYN .00033 00029	1) (17 00	DATA	STAB # ELEVON # DX # MACH #		. 00026 - 00104 - 00000		CYN 00007- 800090
	(ZNHX:7)	PARAMETRIC [0000.8		. 000433 . 00601 . 00000		.00321 .00484 .00000		CY .00346 .00502	(ZNHX27	PARAMETRIC	0000. 0000. 8		.00883 .00824 .00000		CY . COBO1 . COB73
		à	BETA A A CODER A B B CODER A B B C C C C C C C C C C C C C C C C C	2.00	CLM .01801 .02145	69.69	. 000000	_	00000. 10.333.		_	BETA RUDDER # 1099 #	0/ 5.00	CLM . 05366 . 05978 . 00000	07 5.00	80.180 00.000 00.000 00.000
	TER DATA)		u u - 0	-5.00	. 10600 . 13429 . 00000	۵۰۰۶ م	CD .10690 .13792	AL = -5.00	. 10712 . 13827 . 00000	(CRBITER DATA)			الا = -5.0	00000° 64480° 64480°	VAL = -5.00	CD . 06455 . 09593 . 00000
	0251 (ORBITER			ENT INTERVAL	CL .47466 .55552 .00000	IENT INTERVAL	CL .48320 .57957 .00000	GRADIENT INTERVA	ct .48115 .58066 .00000	1321			GRADIENT INTERV	CL ,38555 ,45935 ,00000	ADIENT INTERVAL	CI. . 38557 . 46 <i>3</i> 76 . 00000
	747/1 ATI			.35 GRADIENT	70 87982 77306 00000	.35 GRADIENT	DY 82857 -,78742 00000.	3.35 GRAD	07 87139 82028 00000	3) 747/1 A1			3.31 GRA	07 15855 04730	3.30 GRA	0Y . 09435 . 00000
DATA - CA23B	4-120(CA239)		00 IN. X0	RN/L = 3	00000 000000 0000000000000000000000000	RN/L = 3	0X 20.00000 20.00000	RN/L = 3	0x 20.00000 20.00000	14-120 (CA238		0000 IN. X0 0000 IN. Y0 0000 IN. Z0	PN.Y.		PN-1 •	0000 0000 00000 xa
SOUPCE	ARC		1109,0000 .0000 .375,0000	0 /0	ALPHAC 2.00000 4.00000	0 /0	AL PHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	ARC		1109.0 . = 375.0	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.000000.
TABULATED		DATA	XMRP YMRP ZMRP	SON NO.	MACH .59109 .59091	RUN NO.	MACH .59145 .59106 .00000	FOS NO.	MACH . 59044 . 59121 . 00000		DATA	XMRP YMRP ZMRP	RUN NO.	масн ,58756 ,58727 ,00000	PUN NO.	740H 158996 158662 100000
R 76		REFERENCE DATA	2690.0000 S0.F1 474.8100 IN. 936.6800 IN.		AL PHAD 10.000 12.000 GRADIENT		ALPHAO 10.000 12.000 GRADIENT		AL PHAO 10.000 12.000 GRAD I ENT		BEFFRENCE DAT	2690.0000 50.F 474.8100 IN. 936.6800 IN.		ALPHAO 10.000 12.000 GRADIENT		AL PHAO 10.000 12.000 GRAD IENT
DATE 23 MAR			2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2		30.000 30.000		02 45.000		50.000 50.000 50.000			SAEF PREF BAREF SCALE #		02 3.500 3.500		DZ 7.500 7.500

PEFERENCE DATA

TABULATED SOURCE DATA - CA238

ARC 14-120(CA23B) 747/1 ATT 0351 (ORBITER DATA)

(ZNHX27) (17 OCT 75)

	5.000	,	CBL 00206 00228		CBL 00251 00026		CBL 00244 00230		CBL 00269 00226		CBL 00260 00217 .00000
DATA			CYN 00025 00083		CYN 00072 00121		CYN 00064 00122		CYN 00064 00120		CYN 00063 00000
PARAMETRIC	000. 000. 000.		CY .00705 .00887 .00000		CY .00817 .01042		CY .00807 .01005		CY .00815 .00952		CY . 00830 . 00937
	BETA REUDDER RICRB BOY R	7 5.00	CLM .04895 .05300 .00000	5.00	CLM .04771 .05158	5.00	CLM .04397 .04809	5.00	CLM .04337 .04628 .00000	5.00	CLM .04226 .04579 .00000
		VAL = -5.00/	. 06492 . 08647 . 00000	VAL = -5.00/	CC . 06449 . 08804 . 00000	VAL = -5.00/	CD .06740 .09328 .00000	VAL = -5.00/	CD .06912 .09630	/AL = -5.00/	CD .06930 .09731
		GRADIENT INTERVAL	CL .38582 .46514 .00000	GRADIENT INTERVAL	CL .38624 .47158 .00000	SRADIENT INTERVAL	. 39461 . 49093 . 00000	GRADIENT INTERVAL	CL .40181 .50385 .00000	GRADIENT INTERVAL	CL .40079 .50721 .00000
		3.30 GRA(70 98488 96180.	3.30 GRA	70 . 04020 . 02020	3.29 CRAD	05130 .05130 .02755	3.30 GPAC	54 - 36827 - 30121	3.30 GRAD	07 .05736 .07269
	09.0000 IN. XO .CCOO IN. YO 75.0000 IN. ZO	RN/L .	x0 00000 000000	RN/L =	00000.	RN/L #	00000 00000 00000	Rħ/L ≈	000000.	RN/L =	xa 00000:
	# 1109.0 .0. # 375.0	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.000000	0 /0	AL PHAC 2.00000 4.00000	0 /0	AL PHAC 2.00000 4.00000
E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .58523 .56597 .00000	RUN NO.	MACH .58706 .58528 .00000	FON NO.	MACH .585 33 .565 75 .00000	RUN NO.	MACH .58607 .58557 .00000	RUN NO.	MACH .58565 .58526 .60000
. PEFERENCE DATA	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN.		AL PHAO 10.000 12.000 6RADIENT		ALPHAO 10.000 12.000 GRADIENT		ALPHAO 10.000 12.000 GRADIENT		ALPHAO 10.000 12.000 0PADIENT		AL PHAO 10,300 12,300 GRADIENT
	SREF		02 10.000 10.000		02 15.000 15.000		000.08 30.000 30.000		05 45.003 45.000		50.000 50.000

459	. 27		5.000 .000 10.000 .600		CBL 00185 0026 .00000		CBL 00211 00244 .00000		CBL 00217 00240 00000		CBL 00232 00255 .00000		CBL 00233 00263		CBL 00229 00000
PAGE	(17 001	DATA	STAB ELEVON DX		. 00000 . 00000 . 00000		. 00016 - 00006 - 00000		CYN 00008 000021 .00000		CYN -,00007 -,00024 -,00000		CYN 00021 00040		CYN 00034 00045
	(SAHX2B)	PARAMETRIC D			CY .00827 .00831		.00000 .00000 .00000		. 00000.		60000.		CY .00728 .00780 .00760		CY .00698 .00755
		Q.	BETA RRUDDER RIDKB RDDY R	2.00	.03394 .04830 .00000	2.00	CLM .03625 .04462	/ 5.00	03473 .03473 .03529	/ 5.00	CLM .03309 .04133	1/ 5.00	CLM .03226 .04158 .00000	07 5.00	CLM .03175 .04082
	TER DATA)		B.E C	AL = -5.00/	CD , 0483 5 , 05921 , 00000	AL = -5.00,	00000. 000000. 000000	AL = -5.00	00000°.	AL = -5.00	CD . 04972 . 06153	/AL = -5.00	. 00000	0.25.0	.05296 .05296 .06753
	0351 (ORBITER			ENT INTERVA	27.315 .357.42 .00000	IENT INTERVAL	CL 27979 53752 .00000,	GRADIENT INTERVAL	CL . 28259 . 34052 . 00000	ADIENT INTERVAL	CL . 286 10 . 344 35 . 000 00	GRADIENT INTERVAL	CL .29191 .36548 .00000	SPADIENT INTERVA	CL .29410 .37471 .00000
æ	1 747/1 AT!			3.31 GRADIENT	DY 01230 .09360	3.30 GRADI	92.59 . 02:78 . 00:00:	3.30 GRAD	70 - 100974 - 100903	3.30 GPAD	70 880 1000 1000 1000	3.29 GRAD	0Y .05832 .00000	3.30 564	591492 -01492 07284
DATA - CA238	14-120(CA238)		3.0000 IN. XO .0000 IN. YO 5.0000 IN. ZO	RN/L = 3	00000 10.00000 10.00000	RN/L = 3	00000 10.00000 10.00000	RN/L =	00000 10.60000 10.60000	RN.L =	10.00000 10.000000	R11/1 =	0X 10.00000 10.00000	+ 7/Na	xd 00000.01 00000.01
ED SOURCE	ARC 1		1109.00 10.00 10.00 10.00	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	AL PHAC 2.00000 4.00000	0 /0	ALPHAC 2.03000 4.00000
TABULATED		E DATA	TT. XMRP YMRP ZMRP	RUN NO.	MACH . 58687 . 58723 . 00000	RUN NO.	MACH .58766 .58809	FOR NO.	MACH .58624 .58556 .00000	RUN NO.	MACH .58701 .58720	RUN NO.	MACH .58688 .59711	ON NUS	MACH .58645 .59643
76		REFERENCE DAT	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		AL PHAO 8.000 10.000 GRADIENT		ALPHAD 8.000 10.000 68401ENT		ALPHAO 8.000 10.000 6RADIENT		ALPHAO B.303 04.003		ALPHAO 9.000 10.000 GRADIENT		AL PHAO 8.000 10.000 6A201ENT
LATE 23 MAR			59EF # 26 89EF # 4.5 50ALE # 9		02 3.500 3.500		02 7.500 7.500		02 10.000 10.000		02 15.000 15.000		52 30.000 30.000		02 45.000 45.000

76
MAR 7
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TABULATED SOURCE DATA - CAR3B

PC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA)

1 75)		5.000 .000 10.000		CBL0023800236 .00000	T 75 1		5.000 .000 10.000		CBL 00235 00309		CBL 00221 00278		CBL 00214 00256		CBL 00227 00241 .00000
3) (17 OCT	DATA	STAB # ELEVON # DX # MACH #		CYN 00027 00051	(17 00)	DATA	STAB # ELEVON # DX # MACH #		CYN 00001 00031		CYN 00017 00058		CYN 00024 00075		CYN 00046 00103
(ZNHX28	PARAME TR1C	.000 .000 6.000		CY .00708 .00752	(ZNHX29)	PARAME TR 1C	000 000 8		CY .00779 .00953		CY .00782 .00913		.00784 .00889 .00000		.00761 .00847 .00000
		BETA ERUDDER = 10RB EDY =	00.5.00	CLM .03197 .04104 .00000			BETA # RUDDER # 10R8 # DY	3/ 5.00	CLM .05095 .05506	5.00	CLM .04780 .05191	00'5'/0	CLM . 04549 . 04961 . 00000	00.5.00	CLM . 04342 . 04743
(ORBITER DATA)			/AL = -5.00.	CD .05338 .06826	(ORBITER DATA)			/AL = -5.00.	.06018 .08157 .00000	/AL = -5.00.	CD . 06290 . 08351	/AL = -5.00.	00000. 00000.	/AL = -5.00	CD .06547 .08622
0321			GRADIENT INTERVAL	CL .29927 .38144 .00000	AT1 0351 (ORE			GRADIENT INTERVAL	CL .36973 .44062 .00000	GRADIENT INTERVAL	CL .37631 .44957 .00000	GRADIENT INTERVAL	.38109 .45639 .00000	GRADIENT INTERVA	ct. .38557 .46210 .00000
3) 747/1 AT			3.30 GRAE	70 . 05297 . 00000	747/1			3.31 GRAE	70 .07085 .00873	3.30 GRAE	DY .03020 .03353	3.30 GRA[70 01491 04742 .00000	3.30 GRAE	09362 .09362 .06535
14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L *	00000 00000 00000 00000	14-120(CA23B)		000 IN. XO 000 IN. YO 000 IN. ZO	RN/L =	000000.	RN/L =	000000.01	RN/L =	XD . 01. 01. 00.000 . 01. 01. 01. 01. 01.	RN/L =	000000 10.000000 10.00000
D B A		109.0 375.0	0 /6	ALPHAC 2.00000 4.00000	ARC		1109.0	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	0000 40000 40000 10000 14000 14000	0 %	ALPHAC 8.00000 4.000000
	E DATA	KT. XMRP YMRP ZMDD	PUN NO	MACH .58633 .58669 .00000		E DATA	XMRP XMRP XMRP	PUN NO.	МАСН .58965 .58806 .00000	RUN NO.	MACH .58849 .58815 .00000	RUN NO.	MACH .58770 .58827 .00000	RUZ NO.	74CH - 599C9 - 598C9 - 00000
	REFERENCE DATA	2690.0000 SQ. 474.8100 IN. 936.5800 IN.		ALPHAO 8.000 10.000 GRADIENT		REFERENCE	2690.0000 SQ. 474.8100 IN. 936.5800 IN.		ALPHAO 10.000 12.000 GRADIENT		AL PHAO 19.000 12.000 GRADIENT		ALPHAO 10.000 12.000 GRADIENT		AL PHAO : 0.000 12.000 GRADIENT
		SAEF = SAEF = SAEF = SCALE = S		DZ 50.000 50.000			SREF = CAREF =		02 3.500 3.500		02 7.500 7.500		DZ 10.000 10.000		02 15.000 15.000

461	75)		5.000 .000 10.000		CBL 00242 00223 .00000		CBL 00257 00211		CBL 00213 00211	T 75)		5.000 20.000 20.000		CBL 00221 00212		CBL 00223 00245 .00000
PAGE	(17 007	DATA	STAB = ELEVON = DX = MACH =		CYN 00058 00122		CYN 00059 00118		CYN -,00044 -,00000	1) (17 OCT	DATA	STAB # ELEVON # OX # MACH #		.00028 .00017		CYN . 00008 00036
	(ZNHXZ)	PARAMETRIC C	00000		CY .00755 .00927 .00000		. 00000 . 00907 . 00000		CY . 00752 . 00896 . 0000	(2NHX30)	PARAME TRIC	000. 0000. 0000.		. 00757 . 00815 . 00000		. 00762 . 00808 . 00000
		a.	BETA = RUDDER = 10RB = DY	5.00	CLM .04206 .04505 .00000	/ 5.00	. 04156 . 04440 . 00000	7 5.00	CLM .04125 .04416			BETA = RUDDER = 10R8 = DY	3/ 5.00	00000°.	0/ 5.00	CLM . 04254 . 04545 . 00000
	TER DATA			AL = -5.00/	CD .06782 .09282 .0000	AL = -5.00	CD .096943 .09651	AL = -5.00.	00000.	ORBITER DATA)			VAL = -5.00,	00000. 00000.	VAL = -5.00	CD .06374 .08291
	O3S1 (ORBITE			IENT INTERVAL	CL .39664 .48717 .00000	GRADIENT INTERVA	ct .40006 .50055	GRADIENT INTERVAL	CL .40242 .50328 .00000	AT1 0351 (ORE			GRADIENT INTERVAL	CL .36934 .43558 .00000	GRADIENT INTERVAL	CL .37643 .44438 .00000
m	1 747/1 ATI			.29 GRADIENT	05480 .05027 .05000	.30	DY .06013 .11899 .00000	3.30 GRAD	.05102 .05102 .07609	1747			3.31 GRA	70 .02299 .04884 .00000	3.30 GRA	0.03582 0.03591 0.0000
DATA - CA238	4-120(CA23B		250 IN. YO 250 IN. YO 200 IN. ZO	RN/L = 3	00000 10.00000 10.00000	RN/L = 3	0X 10.00000 10.00000	RN/L =	00000 . 000000 . 000000 .	14-120(CA23B)		0000 IN. X0 0000 IN. Y0 0000 IN. Z0	RN/L =	0X 20.000.05 20.00000.	EN/L =	DX 20.00006 00000.05
SOURCE	_		1109.000 .50 .50.03.275. =	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	A		# 1109. # 375.	0 /0 .	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000
TABULATED		DATA	4 c c c c c c c c c c c c c c c c c c c	RUN NO.	MACH .58839 .00000	ACN NO.	MACH . 56880 . 56936	FILE NO.	7. TO		F DATA	<u>.</u>	CV NUM	0 1 0	97 - Y a	0100 1000 1000 1000 1000 1000 1000 100
75 75		REFERENCE	2690,0000 SO.F1 474.8100 IN. 935.6800 IN.		AL PHAO 10.000 12.000 GRADIENT		AL PHAO 10.000 12.000 GRADIENT		ALPHAO 10.000 12.000 GRADIENT		BEFFBBC	2690.0000 50.F 474.8100 IN. 936.6800 IN.		ALPHAO 10.000 12.000 GRAD1E4T		ALPHAD 10.000 12.000 GRADIENT
. MAR	;		9REF # 2 LREF # 3 BREF # SCALE #		DZ 30.000 30.000		02 45.000 45.000	_	DZ 50.000 50.000			SREF LREF DREF CALE #		02 3.500 3.500		02 7.500 7.500

TABULATED SOURCE DATA - CA238

ARC 14-120(CA23B) 747/1 ATI 03SI (ORBITER DATA)

(ZNHX30) (17 0C1 75)

CT 75 J		5.000 .000 .000)	CBL 0023U 00271		CBL 00217 00276		CBL 00238 00219		CBL -, 00237 -, 00227 , 00000		CBL 00236 00220
(0) (17 00)	0.0 T.A.			CYN 00006 00058		CYN 00014 00057		CYN 00040 00098		CYN 00064 00109		CYN 00047 00111
(ZNHX30	DIST SMARA	000. 000. 8		CY .00771 .00802		CY .00745 .00808 .00000		CY .00737 .00882 .00000		. 00707 . 00867 . 00867		CY . 00735 . 00883 . 00000
		BETA = RUDDER = 10RB = DY =	0/ 5.00	CLM . 04089 . 04439	0/ 5.00	CLM .03918 .04337 .00000		0		CLM .04036 .04303	1 5.00	. 04051 . 04300 . 00000
COMBLIER DATA			/AL = -5.00/	CD .06522 .08404 .00000	/AL = -5.00/	CD .06533 .08533	'AL = -5.00/	CD .06801 .09179	AL = -5.00/	CD .06927 .09388	AL = -5.00/	. 00000 . 09625 . 09626
100 1000 1			GRADIENT INTERVAL	CL .38247 .45686 .00000.	GRADIENT INTERVAL	CL .38214 .45718	GRADIENT INTERVAL	CL . 39200 . 48377 . 00000	GRADIENT INTERVAL	CL .40161 .49626 .00000	GRADIENT INTERVAL	CL .4009! .50275 .00000
			3.30 GRAI	07 .0524.2 .02600	3.30 GRA	07 .03261 .02195	3.29 GRAD	07 .04541 .08552 .00000	3.30 SRAD	ΟΥ . 05524 . 09032 . CCCC	3.30 GRAD	DY 00144 .06742 .00000
		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	DX 20.00000 20.00000	RN/L =	0x 20.00000 20.00000	RN/L =	0x 20.00000 20.000000	RN/L =	DX 20.00090 20.00000	R:1/L = 3	50 .00000 20 .00000 20 .00000
I		1109.	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 / 0	ALPHAC 2.00000 4.00000
	E DATA	FI. XMRP YMRP ZMRP	RUN NO.	MACH .58700 .58651 .00090	RUN NO.	MACH .58572 .58560 .00000	FON NO.	MACH .58806 .58578 .00000	RUN NO.	MACH .58763 .58716 .00000	RUN NO.	MACH . 58729 . 58764 . 00000
	MEFERENCE DATA	2690.0000 SQ.1 474.8100 IN. 936.6800 IN.		AC PHAO 10.000 12.000 GRADIENT		ALPHAO 10.000 12.000 GRADIENT		ALPHAO 10.000 12.000 GRADIENT		ALPHAO 10.000 12.000 GRAD:ENT		ALPHAO 10.900 12.900 GRADIENT
		SREF # BREF # SCALE #		02 10.000 10.000		02 15.000 15.000		52 30.000 30.000		02 45.000 45.000		50.000 50.000 50.000

463	15)		5.000 .000 20.000 .600		CBL 00172 00224 .00000		CBL 00185 00233		CBL 00202 00237 .00000		CBL 00193 00254 .00000		CBL 00226 00224 .00000		CBL 00211 00246 .00000
PAGE	17 001	DATA	STAB = ELEVON = DX = MACH =		.00030 .00003 .00003		CYN .00017 00005		. 000007 . 000007		CYN .00008 00002		CYN 00016 00046		CYN 00023 00044
	(1EXHNZ)	PARAMETRIC [0000.9		CY .00717 .00701		.00000		.00713 .00717 .00000		. 00000		CY .00726 .00667		CY .00669 .00727
		_	BETA ** RUDDER ** 10RB ** DY **	/ 5.00	CLM .03120 .03871	1 5.00	CLM .02991 .03785	1/ 5.00	CLM .02916 .03725	00.5 10	CLM .02078 .03678	00.5.00	CLM .03026 .03870 .00000	00.5 /0	CLM .03062 .03982
	ITER DATA)			AL = -5.00.	.00000	AL = -5.00	. 05023 . 05124 . 00000	AL = -5.00	. 05039 . 05181 . 00000	'AL = -5,00	CD .05031 .05247 .00000	AL = -5.0	. 05264 . 05530 . 00000	'AL = -5.00	CD . 05336 . 06739
	1 03SI CORBITER			GRADIENT INTERVAL	CL .27510 .33292 .00000	GRADIENT INTERVAL	CL .28123 .33913 .00000	IENT INTERVAL	CL .28603 .34346 .00000	GRADIENT INTERVAL	CL . 28787 . 34870 . 00000	GRADIENT INTERV	CL . 29595 . 36524 . 00000	GRADIENT INTERVAL	CL . 29863 . 37648 . 00000
Ö	11 747/1 ATI			3.31 GRAD	03430 .03430 .11658	3.30 GRAD	05331 .08012 .00000	3.30 GRADI	70 -07032 -05534	3.30 GRAD	70 .07484 .02941	3.29 GRAE	70 52 470. 06357.	3.30 GRA	09+86 .09+86 .06729
DATA - CA238	14-120(CA23B		00000 IN. X0	RN/L = 3	20.00000 20.00000 20.00000	RN/L =	20.00000 20.000000	RN/L #	00000 20.00000 20.00000	RN/L =	DX 20.00000 50.00000	RIVL =	0x 20.00000 20.00000	RN/L =	0x 20.00000 20.00000 .00000
ED SOUPCE	ARC		1109.0 2.0 375.0	0	ALPHAC 8.00000 4.000000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	6	ALPHAC 8.00000 4.00000	0 3	ALCCOOD OCCOOD OCCOOD OCCOOD	0 /0	ALPHAC 8.00000 4.000000
TABULATED		E DATA	FT. XMRP YMRP ZMRP	RUN NO.	MACH .58478 .58701 .00000	FUN NO.	MACH .58500 .58679	FCA NO.	MACH .58711 .58647 .00000	RUN NO.	MACH .58716 .00000	PUN NO.	MACH .58705 .58711	PUN NO.	MACH .58719 .58694 .00000
R 76		REFERENCE DATA	2690.0000 SO.1 474.8100 IN. 936.6800 IN.		ALPHAO 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT		ALPHAD 8.000 10.000 GRADIENT		AL PHAO 8.000 10.000 GRAD!ENT
DATE 23 MAR			SAEF BOOK		02 3.500 3.500		02 7.500 7.500		02 10.000 10.000		02 15.000 15.000		02 30.000 30.000		DZ 45.000 45.000

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49 4	(5-		5.000 .000 20.000 .600		CBL 00217 00241	1 22 1		5.000 .000 .000 .600		CBL 00214 00257 .00000		CBL -,00226 -,00264 .00000		CBL 00229 00274 .00000		CBL 00244 00267 .00000
P.A.G.E.) (17 OCT	DATA	STAB = ELE VON = DX #		CYN 00024 000033	100 (17 001	DATA	STAB ** ELEVON ** DX ** MACH **		CYN 00023 00052		CYN 00050 00065		CYN 00049 00070		CYN 00061 00063
	(ZNHX31)	PAPAME 1910	0000		. 00645 . 00691 . 00000	(ZNHX34)	PARAME TRIC			.00917 .00908 .00000		CY .00862 .00853		CY .00856 .00848 .00000		CY .00859 .00863
			BETA ** RUDDER ** 10RB ** DY **	00.5 /0	.03986 .03986 .00000		_	BETA R RUDDER H LORB H DY H	00.5 /0	CLM .04780 .05782	0/ 5.00	CLM .04342 .05330 .00000	0/ 5.00	CLM .04126 .05163	00.5.00	.03831 .04868 .00000
	(ORBITER DATA)			'AL = -5.00/	. 05362 . 05780 . 00000	(ORBITER DATA)			/AL = -5.00,	.00000	/AL = -5.00	CD .04758 .05828 .00000	VAL = -5.00	CD .04797 .05890	VAL = -5.00.	.04859 .06018 .00000
	0351			GRADIENT INTERVAL	. 29954 . 37739 . 00030	T1 0351 (ORE			GRADIENT INTERVA	CL . 27468 . 32933 . 00000	GRADIENT INTERVAL	CL .27938 .33730 .00000	GRADIENT INTERVAL	CL .27895 .34172	GRADIENT INTERVA	Ci. .28282 .34730 .00000
æ	1 747/1 AT!			.30	. 00000	A 1/747 1			.31	07105 01586 01586	3.30 GRAD	DY 03982 04258 .00000	3.30 GRAD	70 03324 06970 .00000	3.30 GRAE	PY 05303 07127 .00000
DATA - CA23B	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L = 3	00000 00000 000000.08	14-120(CA23B		1000 IN. XO 1000 IN. XO 1000 IN. ZO	RN/L = 3	00000 000000 000000	RN/L = 3	xc 000000.	RN/L =	00000°.	RN/L =	00000°.
TED SOURCE	ARC 1		1109.00 10.00 10.00	0 /0	ALPHAC 2.00000 4.00000	ARC		1109.00	0 /0	ALPHAC R.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 / 0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000
TABUL ATED		: DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH . 58699 . 50709		E DATA	XMRP YMRP ZMRP	RUN NO.	MACH .58780 .58730	RUN NO.	МАСН .58691 .58751 .00000	RUN NO.	мAСН . 58588 . 58670 . 00000	PUN NO.	MACH .58673 .58727 .00050
AR 76		REFERENCE DAT	2690.0000 SQ.F 474.8100 IN. 936.6800 IN.		ALPHAO 8.000 10.000 GRADIENT		REFERENCE	2690.0000 SQ.F 474.8100 IN. 936.6800 IN.		AL PHAO 8.000 10.000 GRADIENT		ACPHAO 8,000 10,000 6PAO,ENT		ALPHAD 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT
DATE 27 A			S (3EF = 1.02F) = 1.05 (3EF =		05 50.000 50.000			SAEF = BAREF = SCALE = SCALE		02 3.500 3.500		02 7.500 7.500		DZ 10.000 10.000		02 15.000 15.000

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465	. 27		5.000			CBL 00250 00277		CBL 00265 00248 .00000		CBL 00256 00265 .00000	1 75 1		5.000 5.000 .000 .600		CBL 00109 00053		CBL -,00101 -,00568 .00300
PAGE	(17 001	DATA	CTAB .	ELEVON		CYN 00046 00094		CYN 00068 00095		CYN 00058 00082	0 11 00	DATA	STAB # ELEVON # DX MACH #		CYN .00046 .000013		00000.
	(\SXHNZ)	PARAMETRIC D				. 000836 . 00836 . 00000		.00805 .00795 .00000		. 00000 . 00828 . 00000	O I AHNZ I	PARAMETRIC	000.8		CY .00406 .00528 .00000		CY .00389 .00517 .00000
		à		RUDDER I	/ 5.00	.03705 .03705 .04641	7 5.00	. 03537 . 03537 . 00000	00.5 /	.03508 .03508 .04479 .00000			BETA F RUDDER F TORB C	0/ 5.00	.00000	00/ 5.00	CLM .02638 .03155
	TER DATA)				\L = -5.00,	.05110 .05110 .05416	AL = -5.00	. 05248 . 06661 . 00000	AL = -5.00	. 05269 . 05269 . 06730	ITER DATA)			VAL = -5.00	. 10124 . 12511 . 00000	AL = -5.	CD .10190 .12787
	03S1 (ORBITER				IENT INTERVA	CL .29352 .36715 .00000	IENT IMTERVAL	CL .29754 .37919 .00000	GRADIENT INTERVA	CL .39988 .38230 .00000	T1 0251 (ORB			GRADIENT INTERVAL	CL .46595 .53870 .00000	GRADIENT INTERV	Ct. .46870 .54574 .00000
	747/1 AT1				.29 GRADIENT	. 03707 08504 00000	.30 GRADIENT	74 -, 35594 -, 30590	.30	70 01917 64502 .00000	A 1/747 1			3. 34 GRAI	00000°.	3.34 GRA	000000 000000 A0
DATA - CA23B	14-120(CA238)			000 IN. X.X. V. X. 000 IN. V. X. 000 IN.	RN/L . 3	00000 00000 XQ	RN/L = 3	0000 0000 0000 x	R11/L = 3	00000 00000 xa	14-1201CA238		900 18. X0 600 18. Y0 1000 18. Y0	# 7/N&	X0 01657 050000	FN/L =	000 000 000 000 000 000 000 000
SOURCE	APC			. 1109.0000 .0000 . 375.0000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.000000	0 0	ALPHAC P.00000 4.00000	ARC		# 1109.00 20.00 375.00	0 %	AL 000000	o 60 00	A 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
TABULATED		A 1 4 0		TT. XMRD YMAD ZMRD	SUN NO.	MACH .58733 .58712	RUN NO.	MACH .58710 .58749	F.C.N.	7464 . 58834 . 58759		F DATA		ON NOW	MACH . 59503 . 59130 . 00000	RUN NO	MACH . 59531 . 59576 . 66909
76				936.6800 IN. 936.6800 IN.		ALPHAO 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRAD!ENT		BEFFRENCE	2690,0000,007 474,8100 Hi. 936,6500 IN.		ALPHAD 10.000 12.000 GRADIE 11		AL PHAO 16.000 12.000 69AD (ENT
SATE OF MAR	3			SAEF = 26 CAEF = 9		DZ 30.000 30.000		02 45.000 45.000		50.000 50.000 50.000			SREF REF REF REF REFER R		DZ 3.500 3.500		02 7.500 7.500

TABULATED SOURCE DATA - CA238

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA)

(ZNHY10) (17 OCT 75)

	5.000 5.000 5.000 5.000	•	CBL 00085 00061		CBL 00110 00098		CBL 001CB 00080		CBL 00081 00090		CBL 00088 00078
DATA	STAB ELEVON # DX MACH =		CYN .00050 00034		CYN .00032 00039		CYN .00015		CTN .00018 .000036		CYN .00020 00038
PARAME TRIC	000. 000. 8		CY .00390 .00522		CY .00316 .00480		CY .00307 .00391		CY .00347 .00382		CY .00347 .00391
	BETA # RUDDER # 10R8 # DY	0/ 5.00	CLM .02522 .03022	7. 5.00	CLM .02377 .02855	0/ 5.00	CLM .02:53 .02576	/ 5.00	CLM .02019 .02377 .00000	7 5.00	CLM .01936 .02319 .00000
		/AL = -5,00/	CD .10252 .12978 .00000	'AL = -5.00/	CD .10333 .13146 .00000	AL = -5.00/	. 10649 . 13664 . 00000	AL = -5.00/	CD .10835 .13989 .00000	AL = -5.00/	. 1981. . 14070 . 50000
		GRADIENT INTERVAL	CL .47109 .55061	GRADIENT INTERVAL	CL .47133 .55529	GRADIENT INTERVAL	CL 48237 57405 00000	GRADIENT INTERVAL	0.0000. - 58589 - 58589	GRADIENT INTERVAL	CL .48705 .58919 .00000
		3.33 GRA	O0000 .	3.35 GRA	, 00000 00000 00000	3.35 GRA	00000 ·	3.35 GRA	00000 · 000000 · 000000 · 000000 · 000000	3.35 GRAD	00000. 00000.
	1000 IN. XO 1000 IN. YO 1000 IN. ZO	RN/L =	03048 07336 00000	RN/L .	02992 07123 00000	RN/L =	08807 11959 00000	FN/L =	10677 19502 00000	R11/L #	00000 .
	1109.0000 0000 375.0000	0 /0	AL PHAC 2.00000 4.000000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 0.0000 0.00000 0.00000	0 /0	ALPHAC 4.00000 1.000000
E DATA	FT. XMRP YMBP ZMRP	RUN NO.	MACH .59752 .59802 .00000	RUN NO.	MACH .59633 .59726 .00000	NON NO.	MACH . 59637 . 59584 . 00000	RUN NO.	7	PCE NO.	0 - 0 0 - 0 0 - 0 0 - 0 0 - 0 0 - 0 0 - 0
REFERENCE DATA	2690.0000 SQ.F 474.8100 in. 935.6800 in.		AL PHAO 10.300 12.000 GRADIENT		AL PHAO 10.000 12.000 GRADIENT		ALPHAD 10.000 12.000 GRADIENT		ALPHAO 10.533 12.630 GRA⊡IEN▼		ALPHAO 10.000 0PAD: 0000 GPAD: ENT
	SREF = LREF = BREF = BREF = SCALE =		02 10.000 10.000		02 15.000 15.000		02 30.000 30.000		02 45.000 45.000		50.000 50.000 50.000

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). (1)	
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DATE	

467	15 1		5.000 5.000 .600		CBL 00059 00075		CBL 00071 00079		CBL 00082 00094 .00000		CBL 00082 00100		CBL 00102 00105		CBL 00091 00096
PAGE	(17 OCT	DATA	STAB ELEVON BOX		00000 .00009 .00000		. 00000 . 00000		CYN .00090 .00065		CYN .00088 .00058		. 000083 . 000061 . 00000		CYN .00084 .00000
	(ZNHY13)	ARAMETRIC			. 00301 . 00270 . 00000	-	.00240 .00237 .00000		.00000 .00000		.00000 .00000		.00198 .00294 .00000		.00154 .00154 .00000.
		α.	BETA RUDDER 10PB BY	5.00	CLM .02502 .03221 .00000	5.00	CLM .02238 .02926 .00000	/ 5.00	. 02:75 . 02:75 . 02649	2.00	CLM . 02038 . 02685 . 00000	/ 5.00	CLM .01835 .02451 .00000	00.5 7	01704 .01704 .02539
	TER DATA		.	AL5.00/	00000°.	AL = -5.00/	00000. .09597 .00000.	/AL = -5.00.	00000°.	/AL = -5.00,	CD . 09790 . 00000	RVAL = -5.00	00000. 10189 10100.	ERVAL = -5.007	CD . C8554 . LM+11 . Dubu0
	1 0251 (OPBITER			GRADIENT INTERVAL	. 35204 . 31371 . 1371	ADIENT INTERVAL	CL . 35307 . 42057 . 00000	GRADIENT INTERVAL	CL .35427 .42275 .00000.	GRADIENT INTERVAL	CL .35606 .42661 .00000	GRADIENT INTERY	01 . 35560 . 44 376 . 06000	GRADIENT INTER	Ct . 26973 . 45.837 . 60000
88	B) 747/1 AT1			3.34 GRAD	00000. 000000. 000000.	3.34 CRAD	. 00000 . 00000 . 00000	3.33 GRA[00000. 00000.	3.35 GRA	00000. 000000. 00000000000000000000000	3.35 CRA	00000000000000000000000000000000000000	3.35 GRA	00000 00000 00000 00000
DATA - CA23B	14-120(CA23		130 IN. XO	BN/L .	0x 03811 06523 .00000	RN/L =	01798 04063	RRVL =	00.014.36 014.35 00055.	RN/L =	037957 	R:1/L =	0x 000000 0000000000000000000000000000	RN/L .	. 0x067 .04067 05439
SOURCE	ARC 1		1109.0006 2 00006 375.0006	0 /0	AL PHAC 2.00303 4.05000	0 / 0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00030 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	AL PHAC 2.00000 4.00000	0 / 0	AL PH4C 2.00000 4.000000 4.00000
TABULATED		DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH . 59450 . 59354 . 00000	RUN NO.	MACH .59261 .59217	FCZ NO.	MACH .59174 .59204 .00000	RUN NO.	38103 .59103 .59103	PUN NO.	######################################	RUN NO	MACH .59095 .59107 .00000
R 76		REFERENCE DAT	2590.0000 50.F 474.8100 IN. 936.5800 IN.		ALPHAO B.060 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT		AL PHAO 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT		ALPHAU 8.030 13.003 GRADIENT		AL PHAO 8.000 10.003 5PAD1ENT
DATE 23 MAR			SREF LREF BREF SCALE		02 3.500 3.500		02 7.500 7.500		000 10 10:000		02 15.000 15.000		02 32.000 30.000		02 45.000 45.000

£03	• .		000000000000000000000000000000000000000		CBL .00071 .00064	-		5.000 .000 .000		CBL .00341 .00024		CBL -,00303 -,00501 .00000		CBL 00304 00463 .00000		CSL 65203 06387 .00006	
PAGE 4	OCT 75		ម្ចាស់		8777	OCT 75		iv iv		80.00		80.		B000		8-50	
7 0.	(17	DAIA	STAB • ELEVON • DX • MACH		CYN . 00098 . 00051	(17	DATA	STAB ELEVON B DX MACH		CYN 00036 00094		CYN 00017 00065		CYN .00007 00067		CYN .00024 00037	
	(ZNHY! 3	PARAMETRIC			.00144 .00220 .00000	(ZNHY1B)	PARAMETRIC			.00330 .00173		. 00189 . 00138 . 00000		CY .00249 .00136		CY .00235 .00137	
			BETA	00/ 5.00	CLM .01628 .02208 .00000			BETA RUDDER IORB OY	00/ 5.00	CLM .02468 .03278	0/ 5.00	CLM .02237 .02304 .00000	0/ 5.00	CLM .02145 .02814	0/ 5.00	CLM .02031 .02687 .00000	
	CORBITER DATA			*	CD .08645 .10528	(ORBITER DATA)			.5.	CD . 07938 . 09457 . 00000	/AL = -5.00	CD . 08102 . 09564 . 00000	/AL = -5.00	CD . CB140 . 09767	'AL = .5.00	. 09913 . 09913	
	ATI 0251 (OF			GRADIENT INTERVAL	.37034 .37034 .45889	1 0251			GRADIENT INTERVAL	CL .35752 .41893 .00000	GRADIENT INTERVAL	CL .36204 .42836 .00000	GRADIENT INTERVAL	CL .36214 .43217 .00000	GRADIENT INTERVAL	CI . 36381 .43741 .00000	
ACSB	1/247			3.35 GRA	00000 · 000000 · 000000 · 000000 · 000000	38) 747/1 AT			3.34 GRA	00000 10.00000 10.00000	3.34 GRA[10.00003 10.300003 10.300003	3.33 GRAE	10.00000 10.00000 .00000	3.35 GRAC	DY 10.00000 10.00000	
י טאיא י נאפ	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L .	DX 17655 17839 .00000	14- 120 (CA23		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L	.15123 09423	RN/L	DX 5120% 05523	RN/L .	xa 88283 882880	RIVL .	0x 2222 08119 .00000	
י אפטראינט שטטאנו	ARC		1109. 375.	0 /0 .	ALPHAC 2.00000 4.00000	ARC		1109.	0 /0	ALPHAC 7.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	A; PHAC 2, 00000 4, 00000 1,00000	
		CE DATA	YMRP YMRP ZMRP	RUN NO	MACH . 59144 . 59135 . 30000		E DATA	FT. XYRP YNRP ZMRP	PUN NO	MACH . 59376 . 59178 . 00000	RUN NO.	MACH . 59084 . 59980 . 00000	PUT NO.	MACH .59145 .59157 .00000	PCM NO.	MACH .59100 .59135 .00000	
2		REFERENCE DAT	2690.0000 SO 474.8100 IN 936.6800 IN		AL PHAO 8.000 10.000 GRADIENT		REFERENCE DAT	2690.0000 SQ.F 471.8100 IN. 936.6800 IN.		AL PHAO B.000 10.000 GRAD I ENT		ALPHAC 8.030 10.000 GRAD1ENT		AL PHAO 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRAD1ENT	
) ;			SREF BREF SCALE		02 50.000 50.000			SREF * LREF * SCALE *		02 3.500 3.500		02 7.500 7.500		02 10.000 10.000		02 15.000 15.000	

£69	, 27		8.000 .000 .000 .000		CBL 00213 00270 .00000		CBL 00168 00197 .00000		CBL 00143 00174 .00000	1 75 1		5.000 5.000 6.000 6.000		CBL 00428 00677		CBL 00370 00552
PAGE	(17 OCT	DATA	STAB ELEVON DX MACH		. 000059 - 000001		.00070 .000017		CYN .00075 .00015	1 17 001	DATA	STAB ELEVON DX MACH		CYN 00102 00112		00068 00101 00000
	(ZNHY18)	PARAMETRIC D	6.000		.00000		.00000 .00000		. 00000 . 00000 . 00000	(2NHY 19	PARAMETR1C	.000 .000 8.000 10.000		CY .00308 .00076		. 00160
		•	BETA BRUDDER BIORB BY	1/ 5.00	CLM .01764 .02369 .00000	0/ 5.00	CLM .01628 .02505 .00000	0/ 5.00	CLM .01558 .02144 .00000			BETA ERUDDER EIORB E	00/ 5.00	00000. 000000. 000000	00/ 2.00	CLM .02737 .03278 .00000
	TER DATA			AL5.00/	.08453 .10305 .00000	'AL = -5.00	CC . 10574 . 00000	/AL = -5.00	CD .08693 .10526 .00000	(CRBITER DATA)				00000.	5.	050001. 07751.
	O2SI (CPBLTER			IENT INTERVAL	.368+9 .45034 .00000	GRADIENT INTERV	.37593 .46504 .00000	GRADIENT INTERVAL	137428 137428 146487 100000	0251			GRADIENT INTERVAL	10 84845 84848 100000	GRADIENT INTERVAL	CL .47285 .54977 .00000
æ	747/1 AT!			.35 GRADIENT	10.00000 10.00000 10.00000	3.35 GRAD	DY 10.00000 10.00000.	3.35 GRAD	00.00000 10.00000 10.00000	8) 747/1 ATI			3.34 GRA	0.00000 10.00000 10.00000	3.34 GRA	00000 10.00000 10.00000
CATA - CA23B	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L = 3	x0 18323 12907	RN/L .	00000°	RN/L=	54,546,7 1,05456,7 1,0545000,000,000000,0000000000000000000	14-120(CA238		0050 IN. XO 0000 IN. YO 0000 IN. ZO	RN.L .	XQ - 82979 - 80000.	RN/L .	DX 21857 12511 .ດບວິດດ
ED SOURCE	ARC 1		. 1109.00 	0 /0	ALPHAC 2.00000 4.00000	0 / 0	ALPHAC 2.60000 4.00000	0 /0	ALPHAC 2.00000 4.00000	ARC		# 1109.0 # 375.1	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000
TABULATED		DATA	T. XMRP YMRP ZMRP	RUN NO.	MACH .59185 .59194 .00000	RUN NO.	NACH . 59090 . 59168	FOR NO.	MACH .59017 .59073 .00000		E DATA	XMPP XMRP ZMRP	RUN NO.	MACH . 599%3 . 59118 . 00000	RUN NO	MACH . 59008 . 59000 . 50000
IR 76		REFERENCE	2690.0000 SO.FT 474.8100 IN. 936.6800 IN.		AL PHAO 8 . 000 10 . 000 GRAD I ENT		AL PHAO 8.000 10.330 GPADIENT		AL PHAO B.DCD 10.500 GRADIENT		REFERENCE	2690.5363 53.F. 474.8160 IN. 936.6800 IN.		ALPHAO 10.000 12.000 CPADILHI		ALPHAO 10.000 12.000 69401641
DATE 23 MAR			SREF = 6 LREF = 6 BREF = 5 SCALE =		02 30.000 30.000		02 45.000 45.000		02 50.000 50.000			SREF "LREF" BREF "SCALE"		02 3.500 3.500		DZ 7,500 7,500

CA23B
4
DATA
SOURCE
TABULATED

ARC 14-120(C423B) 747/1 ATT 0251 (ORBITER DATA)

	ر د		. 000 . 000 . 000 . 000))	CBL 00341 00465	<u> </u>	CBL 00262 00356	00000	CBL 00185 00210	00000	CBL 00156 00159		CBL 00118 00138
٠	100 / 1 · 16	DATA	STAB ELEVON B DX MACH	ı	CYN -,00046		CYN 00015 00073		CYN .00007 00058		. 00009 - , 000055		CYN .00017 00045
	1 1 1 2 1	PARAME TRIC			CY .00308 .00223		.00238		CY .00257 .00230		CY .00291 .00404		CY .00287 .00328 .00000
-			BETA RUDDER : 10RB : 27	00 % /00	υ		CLM .02439 .02957 .00000		υ		CLM .02091 .02478		CLM . 02053 . 05000
RBITER DATA				RVAL5.007	.102 .102 .128	7VAL5.00/	.10366 .13084 .00000	NAL = -5.00/	00 10512 13678 00000	'VAL ≈ ~5.00/	CD 17701. 1041.	7AL = -5.007	000000 000000 000000
ATI 0251 (ORBITER				GRADIENT INTERVAL	CL .47658 .55278 .00000	GRADIENT INTERVAL	CL .47248 .55626	GRADIENT INTERVAL	CL .47936 .57558	GRADIENT INTERVAL	CL . 49783 . 58854 . 00000	GRADIENT INTERVAL	CL .48927 .53102 .06600
381 747/1 AT1				3.33 GR	DY 10.00000 10.00000	3.35 CR	07 10.00000 10.00000	3.35 GR	000000 10.000000 10.000000	3.35 GRA	04 10.00000 10.00000	3.35 GRA	04 10.00000 10.00000 .00000
ARC 14-120(C423B)		:	0000 IN. 70	RN/L =	0x 14628 04328 .00000	PN/L =	DX 16675 09205 .00000	RN/L.	00000.	FN/L .	0X 15693 22395 00000	R:1/L =	0x 10655 18570 .00000
A P.C		-	M	0 /0 .	ALPHAC 2.00000 4.00000	0 /0 .	ALP4AC 2.30300 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	At PHAC 8.00000 4.00000 60000
	REFERENCE DATA	F.T.	IN. ZPAP	CN NO.	MACH .59041 .59147 .00000	RUN NO.	MACH .59203 .59136	FOR NO.	масн .5 <u>9</u> 188 .59!60	RUN NO.	MACH .59144 .59159 .00000	RUN NO.	አ ተ ተ ተ ተ ተ ተ ተ ተ ተ ተ ተ ተ ተ ተ ተ ተ ተ ተ ተ
	REFEREN	2690.0000 50	474.8100 IN. 936.6900 IN. 0125		ALPHAO 10.000 12.000 GRADIENT		ALPHAO 10.000 12.000 GRADIENT		ALPHAO 10.000 12.000 GRADIFNI		ALPHAO 10.000 12.000 6R4D1ENT		ALPHAO 10.000 12.000 GPADIENT
			LREF # BREF # SCALE #		52 10.050 10.060		02 15.000 15.000		000.08 30.000 30.000		02 45.000 45.000		50.000 50.000 50.000

DRIG II PAGE IS OF POOR QUALITY

17.1	. 75		5.000 .000 .000 .000		CBL 00250 00212		CBL 00231 00219		CBL 00205 00226		CBL 00251 00224 00000		CBL 00244 00230		CBL 00269 00226
PAGE	1) (17 001	DATA	STAB ELEVON DX		. 00030 00105		CYN 00005 00098		CYN 00024 00082		CYN 00072 00121		CYN 00064 00121		CYN 00064 00120
	(ZNHY27	PARAMETRIC			CY .00891 .00821		CY .00803 .00873		CY .00705 .00898		CY .00818 .01047		CY .00808 .01004		CY .00816 .00953
			BETA RUDDER ICRB DY	00/ 5.00	CLM .05369 .05986	0/ 5.00	CLM .05109 .05605	3/ 5.00	CLM . 04897 . 05201	5.00	CLM .04775 .05163	5.00	CLM . 0+399 . 04812	0/ 5.00	CLM . 04358 . 04631 . 06000
	(ORBITER DATA)	,		. ج.	00000. 00000.	'AL = -5.00	. 06471 . 08598 . 00000	AL = -5.00	CD . 08650 . 03000	'AL = -5.00	00000.	RVAL = -5.00	00000. 00000.	AL = -5.00	CD .05911 .09628 .00000
	1320 1			GRADIENT INTERVAL	CL .39596 .45983 .00000	GRADIENT INTERVAL	CL .38572 .4635' .00000	GRADIENT INTERVAL	CL .38586 .46522 .00000	GRADIENT INTERVA	כר 38624 17174 -	ENT INTE	13 39456 49097 00000.	GRADIENT INTERVAL	CL 40183 50557 00000
gg.	14 1/747 (S			3.31 GRAD	00000 00000 000000	3.30 GRAC	, 00000 00000 000000	3.30 GRAE	00000. 000000.	.30	00000 · 000000 · 000000 ·	3.29 GPADI	000000 000000	.30	00000. 000000.
DATA - CA238	14-1201CA23B		0000 IN. YO 0000 IN. YO 0000 IN. ZO	RN/L = 3	7X 15845 23371 .00000	RN/L =	0x 10359 14421 00000	RN/L = 3	0x 05370 07425 .00000.	Phil = 3	08905 13400 13400	RN/L = 3	xa 10707 52752	RN/L = 3	0X 05563 16527 .00000
TABULATED SOUPCE	ARC		1109.0 .0 .375.0	0 /0	ALFHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00030 4.00000	0 / 0	ALPHAC 2.00000 4.00000	0 / 0	ALPPAC 2.0000 4.00000 4.00000	0 / 0	ALPHAC 2.00000 4.00000
TABULA	-	E DATA	KARP YKRP	RUN NO.	MACH .58746 .58723 .00050	PUN NO.	MACH . 58591 . 58558 . 00000	FUN NO.	MACH . 58620 . 59592 . 60000	RUN NO.	MACH .58704 .58623 .00900	RUN NO.	MACH .58526 .58569 .00000	RUN NO.	MACH . 58533 . 58548 . 00000
MAR 76		PEFERENCE DAT	2690.0000 SQ.I 474.81C0 IN. 935.6800 IN.		AL PHAO 10.000 12.000 GRADIENI		ALPHAO 10.000 12.000 GRADIENT		AL PHAO 10.000 12.000 CPAD1ENT		AL PHAG 10.000 12.000 GRAD I ENT		ALFHAO 10.000 12.003 GRADIENT		ALPHAO 10.303 12.050 GRADIENT
DATE 23 MA			SREF = 2 LREF = 2 BPEF = SCALE =		02 3.500 3.500		02 7.500 7.500		DZ 10.000 10.000		02 15.000 15.000		52 30.009 30.300		02 45.000 45.000

TABULATED SOURCE DATA - CA23B

ARC 14-120(CA23B) 747/1 ATI 0351 (ORBITER DATA)

(ZNHY27) (17 OCT 75)

	0000.	000	CBL 00260 00217	r	- ()		5.000 .000 .000 .600		CBL 00377 00645		CBL 00382 00553		CBL 00357 00528		CBL 00352 00506 00000
. 0414	STA		CYN 00063 00122	-			STAB ELEVON DX MACH		CYN 00162 00252		CYN 00127 00196		CYN 00112 00207		CYN 001004 000000.
PARAMETRIC	0000.8		CY .00832 .00939	(CZAHNZ)	Cirrist	PARAME IRIC	6.000 10.000		. 00060 . 00679 . 00000		.00620 .00570		CY . 00649 . 00547		CY .00545 .00563
	BETA ERUDOER BIORB	0/ 5.00	2000 2000 2000				RUDDER .	5.00	CLM . 04427 . 05472	2.00	7568	7 5.00	CLM . 03936 . 04887 . 00000	/ 5.00	CLM .03827 .04807 .00000
		-5.0		(OPBLIER DATA)				AL = -5.00,	CD .04683 .05709	¥. - -5.007	00000°;	AL = -5.00.	00000. 24840. 54917.	AL = -5.00/	00000° 04090° 66840°
		GRADIENT INTERVAL	CL .40976 .50730	AT1 0351 10P				GRADIENT INTERVAL	CL .28238 .33762 .00000	GRADIENT INTERVAL	CL .28745 .34553 .00000	GRADIENT INTERVAL	CL .88471 .34441 .00000	GRADIENT INTERVAL	CL .28677 .35166 .00000
		3.30 GRA	00000 · 00000 · 000000 · 000000 · 000000	747/1				3.31 GRAD	00000 10.00000 10.00000	3.30 GRAD	0,00000 10,00000 10,00000	3.30 GRAD	00000 10.00000 10.00000	3.30 GRAD	DY 10.00000 10.00000
	0000 IN. YO 0000 IN. YO 0000 IN. ZO	RN/L	00000 - 16345 - 16345 - 00000	14- 120(CA23B)		ž	0000 IN. YO	PN/L =	0x -,05886 -,08259	BRIVE .	0x 11877 05152	RN/L .	2.15591 15591 04041	RN/L =	00000 08464 00000
	1109.	0 / 0 .	ALPHAC 2.00000 4.00000	ARC		1109.0		0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.02000 4.90300	0 /0	ALPHAC 2.00000 4.00000
E DATA	FI. XMRP YMRP ZMRP	RUN NO.	МАСН . 59563 . 58531 . 00000		E DATA		YMRP Zmrp	RUN NO.	MACH .59674 .58735 .00000	RUN NO.	MACH .58723 .59724 .00000	RUN NO.	MACH .59727 .58739 .00000	RUN NO.	MACH .58721 .58776 .00000
PEFERENCE DAT	2690.0300 SO.FT 474.8100 IN. 935.6900 IN.		ALPHAD 10.000 12.000 GRADIENT		REFERENCE DATA		936.6800 IN. 936.6800 IN.		ALPHAO 8.000 10.000 GRADIENT		ALPHAD 8.000 10.000 GRAD!ENT		ALPHAO 8.000 10.000 GRADIENT		ALPHAO B.JOU 10.COO GRADIENT
	SPEF LREF BREF SCALE		50.000 50.000 50.000				BREF . SCALE .		02 3.500 3.500		02 7.500 7.500		02 10.999 10.969		02 15.000 15.000

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CBL -.00337 -.00390 CBL -.00262 -.00319 CBL -.00273 -.00302 CBL -.00468 -.00709 CBL . 00527 . 00825 . 00000 5.000 .000 .000 .000 5.000 .000 .000 .000 473 2 PAGE 17 OCT 17 001 CYN -.00062 -.00121 CYN -.00067 -.00107 CYN -.00060 -.00098 CYN -.00189 -.03242 -.00000. CYN -.30167 -.50229 STAB ELEVON DX MACH STAB ELEVON DX MACH PARAMETRIC DATA DATA (2NHY32) (ZNHX33) PARAMETRIC .000662 .00643 .00679 .00648 CY .00635 .00630 .00000 CY .00492 .00485 CY .00575 .00545 .00000 .000 .000 6.000 .000 .000 .000 .000 CLM .03407 .04589 .00000 CLM . 03434 . 04407 . 00000 CLM .051G1 .75622 .30000 .03600 .03600 .04591 CLM .05327 .05842 .00000 5.00 5.00 BETA RUDDER ICRB DY 5.00 5.00 5.00 BETA RUDD'R 1048 DY -5.00/ 5.00/ -5.007 -5.007 , 5.00/ 747/1 AT1 0351 (ORBITER DATA) ARC 14-120 (CA238) 747/1 ATT 0.55; (ORBITER DATA) CD .05168 .06+87 .06300 .05300 .05300 .06709 CD . 05355 . 05399 . 03000 CD . 05832 . 09071 . 00000 CD .05152 .02280 .00000 GRADIENT INTERVAL GRADIENT INTERVAL GRADIENT INTERVAL GRADIENT INTERVAL CRADIENT THTE PVAL CL .29529 .35787 .00000 CL .29865 .37639 .00000 CL .30019 .38190 .00000 CL .37945 .45430 .00600 Ci . 39275 . 4536. . 00000 10.00000 10.00000 10.00000 10.00000 10.00000 10.00000 DY 10.00000 10.00000 3.30 3.29 3.30 3.30 3.3 APC 14-120(CA23B) TABULATED SOURCE DATA - CA23B 858 1109.0000 'N. XO .0000 IN. YO 375.0000 IN. ZO 0X -.18137 -.13226 .60000 06798 -.06798 -.11714 .000003 DX -,07999 -,07999 -,079999 00.00. 00.00. 19113 - 15384 - 00000 1109.0000 IN. Y .0000 IN. Y 375.0000 IN. Z = 1/1E * 7/N; - L E 1118 ALPHAC .00000 .00000 ALPHAC 2.00000 4.00000 ALPHAC P. 00000 4. 00000 AL PHAC 8. 00010 4. 00000 0 *د* ن 0 6 ဂ က ် ပဲ ò 44.77 44.77 44.77 PUN NO. PUN 110. 7.53.P 7. PULL NO. SC 1228 PUM NO MACH .58761 .56835 .00000 .58737 .58737 .58771 340H .58883 .58899 ##6884 * \$888 * \$888 * \$888 * \$888 REFERENCE DATA REFERENCE DATA 50.FT. \$0.51. IN. AL PHAO 8.000 10.000 GPAD1ENT ALPHAO 8.030 10.000 GRADIENT ALPHAO B.000 10.000 CPADIENT ALPHAO 10.000 12.000 GRADIENT ALPUAO 19.000 12.000 09ADIENT 2690.0090 5 474.8109 1 936.6900 1 2690.0000 9 474.8100 9 936.6300 1 6550 30.000 30.000 52 45.000 45.000 50.000 50.000 50.000 52 3.500 3.500 02 7.530 7.530 SPEF LREF BREF SCALE SREF LPEF BREF SCALE

CBL -.00432 -.00619 CBL -.00412 -.00544 -.00000 CBL -,00286 -,00312 CBL -.00275 -.00295 .00000 5.000 .000 .000 .600 (17 001 75 PAGE CYN -.00149 -.00218 CYN -.00133 -.00211 CYN -.00093 -.00199 CYN -.00112 -.00168 CYN -.00094 -.00148 STAB ELEVON DX MACH PARAMETRIC DATA (ZNHX33) .00612 .00587 .00000 CY .00674 .00650 .00731 .00757 .00050 .00000 .00031 .00000 . 00734 . 00852 . 00000 CLM .04918 .05469 .00000 CLM .04755 .05278 .00000 .00000 .04995 .00000 CLM . 04440 . 04797 . 00000 CLM . 04 381 . 04 713 . 00000 BETA RUDDER 1088 -5.00/ 5.00 5.00 5.00 5.00 5.00 GRADIENT INTERVAL = -5.00/ -5.007 -5.00/ GRADIENT INTERVAL = -5.007 AHC 14-120(CA23B) 747/1 ATI 03SI (ORBITER DATA) CD .06391 .08427 .03060 CD .06450 .08623 .00000 CD .06736 .09320 .00000 CD .06933 .09574 .00000 CD .06913 .09599 .00000 GRADIENT INTERVAL 3.30 GRADIENT INTERVAL GRADIENT INTERVAL CL .38563 .46337 .00000 CL .38575 .46896 .00000 CL .39629 .49512 .00000 CL .40287 .50389 .00000 CL .40168 .50515 .00000 10.00000 DY 10.00000 10.00000 10.00000 10.00000 .00000 10.00000 10.000000 .00000 10.00030 10.00030 .00030 3.29 3.30 1109.0000 IN. XO .0000 IN. YO 375.0000 IN. ZO 0X -.20367 -.11484 .00000 0X -.19234 -.11594 .00000 DX -.19577 -.16472 DX -.17007 -.20028 RN/L = RN/L = 3N/L = SN/L = 2.00000 4.00000 ALPHAC 2.00000 4.00000 0 6 o 6 ALPHAC 2.00000 4.000000 ALPHAC 2.00000 4.00000 ALPHAC ALPHAC 2.00000 4.00000 0 0 0 /0 RUN NO. SUN NO FUN NO. RUN NO MACH .58882 .58908 .00000 RCN NO MACH .58936 .58918 .00000 MACH .58932 .58895 .00000 MACH .58684 .58661 .00000 МАСН .58784 .58733 .00000 REFERENCE DATA 2690.0000 SQ.FT. 474.8100 IN. 93C.6800 IN. AL PHAO 10.000 12.000 GRAD1ENT AL PHAO 10.000 12.000 GRADIENT AL PHAO 10.000 12.000 GRADIENT ALPHAO 10.000 12.000 GRADIENT ALPHAO 10.000 12.000 GRADIENT DZ 10.000 10.000 02 15.000 15.000 D2 30.000 30.000 02 45.000 45.000 02 50.600 50.000

. 475	, 57		5.000. .000. .000. .000.		CBL 00215 00257 .00000		CBL 00227 00265		CBL 00230 00276 .00000		CBL 00245 00269		CBL 00260 00278 .00000		CBL 00265 00248
PAGE	17 001	DATA	STAB # ELEVON # DX # MACH #		CYN 00023 00053		CYN -,00050 -,00065		CYN 00049 00071		CYN 00061 00065		CYN 00046 00095		CYN 00068 00096
	(ZNHY34)	PARAME TRIC	000.9		.00914 .00908 .00000		CY .00861 .00852		CY . 00854 . 00847 . 00000		CY .00857 .00961		CY .00879 .00835		. 00006 . 00796 . 00000
			BETA RRUDDER RIORB BY BY	00.5 /	CLM .04766 .05781	00.5 /	CLM .04337 .05329	00.5 /(CLM .04122 .05164	00.5 /(CLM .03829 .04872	00.5 /0	CLM .03703 .04644 .00000	07 5.00	CLM .03541 .04508 .00000
	(ORBITER DATA)			AL = -5.00/	.04687 .05713	'AL = -5.00/	CD . 04759 . 05828 . 00000	'AL = -5.00/	CD . 04798 . 05890 . 00000	/AL = -5.00/	CD .04860 .05318	/AL = -5.00	CD . 05110 . 06415	/AL = -5.00	CD , 0524 8 , 06659 , 00000
	0321			GRADIENT INTERVAL	CL . 27470 . 32934 . 00000	GRADIENT INTERVAL	CL .27942 .33784 .00000	GRADIENT INTERVAL	CL . 27899 . 34175 . 00000	JENT INTERVA	CL .28286 .34735 .00000	GRADIENT INTERVA	CL .29362 .36717 .00000	GRADIENT INTERVAL	cL .29761 .37929 .03000
38	3) 747/1 ATI			3.31 GRAD	YQ 00000 . 00000 .	3.30 GRAD	ρχ . 00000 . 00000 .	3.30 GRAE	00000°.	3.30 GRAD1	00000°.	3.29 GRA(00000°.	3.30 GRA	00000. 00000.
DATA - CA238	14-120 (CA23B		.0000 IN. XO .0000 IN. YO .0000 IN. ZO	RN/L =	DX . 16221 . 00123	RN/L =	02405 -,05538 -,00000		00260.	RN/L	DX .05004 05659	RN/L =	00000.	RN/L .	0x 12500 15488 .co030
ED SOURCE DATA	ARC		1109.0 .0 . 375.0	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	AL PHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000
TABULATED		DATA	T. XMRP YMRP ZMRP	RUN NO.	МАСН .58779 .58730 .00000	RUN NO.	масн . 58691 . 58751 . 00000	FUN NO.	масн . 58688 . 58671 . 00330	RUN NO.	MACH .58673 .59727 .00000	RUN NO.	МАСН . 58732 . 58712 . 00000	RUN NO.	MACH .58712 .58751 .00000
MAR 76		REFERENCE	2690.0000 SO.F 474.8100 IN. 936.6800 IN.		ALPHAO 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT		ALPHAO 8.000 10.000 GRADIENT		ALPHAO B.000 10.000 GRADIENT		AL PHAO 8.000 10.000 GRADIENT
DATE 23 MA			SREF = 6 LREF = 6 BREF = 5 SCALE =		02 3.500 3.500		02 7.500 7.500		05 10.000 10.000		02 15.000 15.000		50 30.000 30.000		0Z 45.000 45.000

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PAGE 47	27 TS		2.00
PAC	17 00		•
	-	DATA	STAB
	(ZNHY34) (17 OCT 75	PARAMETRIC DATA	.000 STAB .
			•
			BETA •
	ARC 14-120(CA23B) 747/1 ATI 0351 (ORBITER DATA)		
TED SOURCE DATA - CA238	ARC 14-120(CA23B)		OX .NI 0000.0011 *
ABULAT			XMRP YMRP
MAR 76 TA		REFERENCE DATA	2690.0000 SO.FT. XI

CBL -.00257 -.00265 CBL -.00062 -.00068 CBL -.00074 -.00073 CBL -.00089 -.00090 CBL -.00080 -.00074 0000 5.000 5.000 .000 .000 75 17 001 CYN -.00059 -.00083 CYN .00132 .00116 CYN .00119 .000109 CYN .00114 .00000 .00120 .0013 ELETON DX MACH STAB ELEVON DX MACH PARAMETRIC DATA (DIWHNZ) CY .00795 .00828 .00000 CY .00340 .00305 CY .00389 .00427 .00000 CY .00373 .00372 CY . 00430 . 00394 . 00000 6.000 6.000 0000. CLM .01203 .01995 .00000 CLM .03513 .04486 .00000 BETA RUDDER I LORB CLM .01574 .02359 .00000 CLM .01240 .02062 .00000 RUCOER 10RB 5.00 5.00 5.00 5.00 5.00 GRADIENT INTERVAL . -5.00/ -5.00/ 1.98 GRADIENT INTERVAL = -5.007 1.98 GRADIENT INTERVAL = -5.007 -5.00 ARC 14-1201CA23B) 747/1 ATL 0251 (O9BITER DATA) CD .05268 .06728 CD .06678 .07483 .00000 CD .06864 .07658 .00000 .00000 CD . 05934 . 07796 . 00000 GRADIENT INTERVAL 1.98 GRADIENT INTERVAL CL . 29989 . 38229 . 00000 CL . 24719 . 30555 . 00000 CL .25127 .30965 .00000 CL .25729 .31489 .00000 Cl. . 25929 . 32256 . 00000 00000 .06542 .06946 .00000 .06605 .03934 .00000 .03278 DY -.00233 -.02863 . 38 3.30 375.0000 IN. ZO 0000 IN. XO 0000 IN. YO 375.0000 IN. ZO DX -.14372 -.16752 .00000 DX -.00100 -.06036 .05171 -.05693 -.06693 -.03693 -.09667 DX -.05021 -.03167 .00000 RN/L = RN/L = * 1/N2 ALPHAC 2.00000 4.00000 0 6 ALPHAC 2.00000 4.000000 AL PHAC 2.00000 4.00000 AL PHAC 2.00000 4.00000 ALPHAC 2.00000 4.00000 0 % o 6 0 % 6 ZMRP PUN NO. PUN NO RCN NO RUN NO RUN NO MACH .58807 .58762 .00000 MACH . 60000 . 60000 MACH .60000 .60000 MACH .60000 .00000 .60000 .00000 REFERENCE DATA 2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN. 935.6800 IN. ALPHAC 5.894 7.900 GRADIENT AL PHAO 5.869 7.899 GRADIENT AL PHAO 8.000 10.000 GRADIENT ALPHAO 5.829 7.893 GRADIENT ALPHAO 5.881 7.904 GRADIENT 50.000 50.000 50.000 02 3.500 3.500 02 10.000 10.000 02 15.000 15.000 02 7.500 7.500 SPEF **
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77.	. 25.				CBL 03120 00094 .00000		CBL0010400107		CBL 00090 00107	1 75)		5.000 .000 .500		CBL 00055 00054 .00000		CBL 00081 00068
PAGE	17 001	DATA	STAB ELEVON BOX MACH		CYN .00121 .00103		. 00109 . 00100 . 00000		. 00000 . 00097	130 (17 001	DATA	STAB ELEVON DX		CYN .00122 .00110		. 00107 . 00104 . 00000
	O NHWZ)	PARAME TRIC	00000		.00385 .00385 .00000		.00310 .00295 .00000		. 00258 . 00293 . 00000	(1+MHNZ)	PARANE TRIC	0000		.00401 .00389		.00343 .00357 .00000
		_	BETA RUDDER RICORB RICORB	00'2'/0	.00880 .01680	00 2 70	CLM .00719 .01597	00.5.00	.00050 .00550 .01580			BETA = RUDDER = 108B = DY	0/ 5.00	CLM .01556 .02240 .00000	00/ 5.00	.01297 .01965 .01965
	CORBITER DATA			'AL5.00/	.00000	AL = -5.00	. 00000	/AL = -5.00.	CD .07409 .08471 .00000	(ORBITER DATA)			VAL = -5.00.	CD .06692 .07462 .00000	. = -5.	.06828 .07504 .00000
	0251			GRADIENT INTERVAL	CL .27091 .33717 .00000	TENT INTERVA	CL .27202 .35183 .00000	GRADIENT INTERVAL	CL .27095 .35685 .00000	0251			GRADIENT INTERVAL	CL .24581 .30110	DIENT INTERVA	CI. 25442 30681 00000
©	1) 747/1 AT1			1.97 GRAD	DY .08608 00038	1.97 GRADIE	07 . 05138 . 00599	1.97 GRAD	01755 00239 00000	3) 747/1 ATI			1.98 GRAE	07 -,16589 -,15274 .00000	1.98 GRADII	07 -,14206 -,14979 ,00000
DATA - CA238	14-120(CA23B)		0000 IN. YO 0000 IN. YO 0000 IN. ZO	RN/L = 1	06702 10134	RN/L *	14608 18392 00000	RN/L =	.19897 19897 00000	14-120(CA239)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	- 1/NG	08435 05208 00000.	PN/L =	07 - 10309 - 06481 - 00000
TED SOURCE	ARC		# 1109.0 # 375.0	0 /0	ALPHAC 2.00000 4.000000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	ARC		1109.0 1.375.4	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000
TABULATED		DATA	T. XMRP YMRP ZMRP	RCN NO.	#ACH .60000 .00000	RUN NO.	MACH . 60000 . 60000	FICH NO.	MACH .60000 .00000		E DATA	FI. XMRP YMRP ZMRP	PCN NO	7. 50000 00000 00000	SCN NO	#ACH .50000 .00000
R 76		REFERENCE DAT	2690.0000 SQ.F 474.8100 IN. 936.6830 IN.		AL PHAO 5,918 7.926 GRADIENT		ALPHAO 5.909 7.898 GRADIENT		AL PHAO 5.896 7.883 GRADIENT		REFERENCE	2690.0000 SO.F 474.8100 IN. 935.6800 IN.		ALPHAO 6.005 7.943 GRADIENT		ALPHAO 6.013 7.938 GRADIENT
DATE 23 MAR			SREF = 2 LREF = 8 BREF = SCALE =		02 30.000 30.000		02 45.000 45.000		50.000 50.000 50.000			SREF # SBREF # SCALE #		02 3.500 3.500		02 7.500 7.500

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

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(17 OCT 75 PAGE

(INHWAI)

CBL -.00057 -.00069 CBL -.00103 -.00094 .00000 CBC -.00105 -.00102 CBL -.00105 -.00092 CBL -.00114 -.00091 ... 0000. 0000. .00105 .00098 CYN .00000. .000000. CYN .00101 .00103 .00093 .00093 .00090 .00090 STAB ELEVON DX MACH PARAMETRIC DATA CY .00366 .00355 CY .00263 .00305 .00000 . 00254 . 00300 . 00000 CY .00265 .00331 CY .00339 .00335 CLM .01177 .01979 .00000 CLM .00881 .01681 CLM .01070 .01797 CLM .00782 .01574 .00000 CLM .00757 .01537 .00000 BETA RUDDER 10RB DY GRADIENT INTERVAL = -5.00/ 5.00 5.00 5.00 5.00 GRADIENT INTERVAL = -5.00/ GRADIENT INTERVAL . -5.00/ GRADIENT INTERVAL . -5.00, * -5.00/ CD .05873 .07684 .00000 CD .07905 .07838 .00000 CD .07236 .08150 CD .07345 .08373 .00000 CD .07378 .08446 .00000 GRADIENT INTERVAL CL . 25662 . 31093 . 00000 CL . 26338 . 32055 . 00000 CL .27400 .33877 .00000 CL . 28000 . 35279 . 00000 CL . 28209 . 35752 . 00000 -.12361 -.13841 .00000 -.10725 -.09299 -.11765 -.12827 .00000 -.09718 -.14783 .00000 -.08635 -.14681 .00000 . 98 . 98 1.97 1.97 1.97 1109.0000 IN. XO .0000 IN. YO 375.0000 IN. ZO ..15015 -.07892 .00000 0x -.07040 -.05100 7X -.07934 -.09778 RN/L = RN/L RN/L = * 1/Nz 341 × AL FHAC 2.00600 4.00900 ALPHAC 2.00000 4.00000 ALPHAC 2.00030 4.00000 0 /0 ALPHAC 2.00000 4.000000 0 /0 0 /0 0 0 ₩. 00000 00000 00000 ALPHAC XMRP YMRP ZMRP RUN NO Se No FUN NO. RUN NO. PUN NO. MACH .50000 .50000 MACH .50000 .50000 MACH .50000 .50000 MACH .50000 .00000 MACH .50000 .50000 REFERENCE DATA 50.FT. ALPHAO 6.065 7.961 GRADIENT 2690.0030 9 474.8100 1 936.6800 1 55 ALPHAO 6.056 7.958 GRADIENT ALPHAO 6.013 7.948 GRADIENT ALPHAO 6.043 7.959 GRADIENT ALPHAO 5.997 7.941 GRADIENT 02 10.000 10.000 02 15.000 15.000 DZ 30.000 30.000 02 45.000 45.000 50.000 50.000 50.000 SREF LREF BREF SCALE

м	7. 7.		ហហ		- 1 1		- 1 1		• •		1 1		, ,
PAGE	17 001	DATA	STAB ELEVON BOX MACH		CYN .00073 .00070		CYN .00050 .00001		.00033 .00043		CYN .00059 .00056		.00053 .00054 .00000
	(24MHVZ)	PARAMETRIC D	.000 .000 .000 .000 .000 .000		CY .00326 .00315		CY .00189 .00266		.00053 .00144 .00000		CY .00246 .00252 .00000		. 00000 . 000950 . 00000
			BETA RUDDER 10RB DY	/ 5.00	CLM .01568 .02255 .00000	/ 5.00	CLM .01347 .01997	00.5	CLM .01200 .01912	00.5 //	CLM .01076 .01819	00.5 /	CLM .00924 .01711
	HER DATA			'AL * -5.00/	. 05851 . 07713 . 00000	'AL = -5.00/	CD . 06979 . 07887	/AL = -5.00/	CD .07000 .07979	/AL = -5.00/	00000.	VAL = -5.00/	CD . 07425 . 08424 . 00000
	11 0251 (ORBITER			GRADIENT INTERVAL	CL .24783 .30620 .00000	GRADIENT INTERVA	CL .25897 .31786	GRADIENT INTERVAL	CL .25472 .32044 .00000	GRADIENT INTERVAL	CL .26416 .33075 .00000	GPADIENT INTERVAL	CL .27456 .34867 .00000
38	B) 747/1 AT1			1.98 GRA	DY 01679 02787	1.98 GRA	07 -,04520 -,02685 .00000	1.98 GRA	07 01635 04987	1.98 GRA	70 02784 03544	1.97 GPA	70 46520 46520 46520
DATA - CA238	14-120(CA23B)		.00000 IN. XO .00000 IN. YO	RN/L *	01825 00129	RN/L =	00000°.	RN/L =	00000.	RN/L =	00000.	RIJ/L =	DX 11489 07696
ATED SOURCE	ARC		= 1109.0000 = .0000 = 375.0000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.00000	0 /0	ALPHAC 2.00000 4.000000	0 /0	ALPHAC 2.05000 4.00000
TABULA		DATA	T. XMRP YMRP ZMRP	PUN NO.	MACH .30000 .00000	RUN NO.	.30000 .30000 .00000	FUN NO.	МАСН . 30000 . 00000	PUN NO.	MACH .30000 .00000	RUN 110.	MACH . 30000 . 30000
AR 76		REFERENCE DATA	2690.0000 SQ.FT 474.8100 IN. 936.6800 IN.		ALPHAO 5.964 7.936 GRADIENT		ALPHAO 5.994 7.984 GRADIENI		ALPHAO 5.952 7.994 GRADIENT		AL PHAO 6.005 7.951 GRADIENT		ALPHAO 6.029 7.979 GRADIENT
DATE 23 MAR			SREF = ; LREF = BREF = SCALE =		02 3.500 3.500		02 7.500 7.500		02 10.000 10.000		02 15.000 15.000		02 30.000 30.000

CBL -. 00040 -. 00047 -. 00000

5.000 5.000 .000 .300

479

CBL -.00048 -.00041 .00000

CBL -.00097 -.00083

CBL -.00051 -.00003

CBL -.00084 -.00047

CBL -.00073

.00053 .00041

.00198 .00119

CLM .00835 .01558 .00000

07544 .09543 .00000

CL . 28098 . 35594 . 00000

0Y -.12238 -.10352

08171 -.09171 -.05811

ALPHAC 2.00000 4.000000

MACH .30000 .30000

AL PHAO 6.024 7.983 GRADIENT

02 45.000 45.000

5.00

1.97 GRADIÉNT INTERVAL = -5.007

RN/L =

0 /0

RUN NO.

PAGE 480	(ZNHM42) (17 OCT 75)	PARAMETRIC DATA	.000 STAB * 5.000
		PARA	BETA - PUDDER =
	ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA)		
ID SOURCE DATA - CA238	ARC 14-120(CA238)		0X .NI 0000.
ABULATED			XMRP .
23 MAR 76 T.		REFERENCE DATA	2590.0000 SQ.FT.

	5.000 5.000 300		CBL 00050 00042	1 75 1		5.000 5.000 .600						
DATA	STAB ELEVOTE DX MACH		CYN .00057 .0000.	18) ¢ 17 0CT	: DATA	STAB ELEVON # DX MACH #						
PARAME TRIC	0000.		CY .00209 .00117	(PNH008)	PARAME TRIC	. 000. 000. 5.000.		DCBL .00029 .00014		0.81 .00043 00018 00086		OCBL .00017 00060 00045
	BETA PUDDER TORB TORB	10/ 5.00	00000. 000000. 000000.			BETA # RUDDER # 10R8 # DY		DCYN 		50.0047 . 0.000047 . 0.00001		NY20 50000. 50000. 50000.
		NAL = -5.00/	07587 .07587 .08564	(CARSIER DATA)			-5.00/ 5.00	700 -00500. -00192 -0005050.	.00. 5.00	PCY -,09391 -,00177 -,00657	5.00/ 5.00	777 - 001-23 - 001-99 - 0001-99
		GRADIENT INTERVAL	CL .28410 .35813	AT1 0251 (CA			91	DCLM .11015 .12074 .12509	INTERVAL = -5	DCIM .03593 .10692 .10645	INTERVAL = -E	MTDG .08426 .09639 .09688
		1.97 GR/	.16157 13170 .00000	1/247			GRADIENT INTERVAL	000 -,50234 -,00391 -,00391	GRADIENT IN	000 100133 1000133 1000133	GRADIENT IN	00057 00057 00051 00161
	0000 IN. YO 0000 IN. YO	RN/L =	DX 09355 04000	14-120(CA23B)		339.9000 IN. XC .0000 IN. YC .90.7500 IN ZC	= 3,34 (DCL 10555 14336 01013	= 3.35 (200 	3,35	500 08258 10023 12044
	1109	0 00 0	ALPHAC 2.00000 4.00000	ARC		N 11 11	RN/L	3.500 ALPHAC .000 2.000 4.000 GRADIENI	RN/L	7.500 ALCHAC .000 2.600 4.000 GRADIENT	PN/L	10.009 ALPHAC .000 2.000 4.000 GRADIENT
DATA	XMRP YMRP ZMRP	NON NO	MACH .30000 .30000		DATA	XMRP YMPP ZMRP		p		H		a
REFERENCE DATA	2590.0000 SQ.FT 474.8100 IN. 932.6900 IN.		AL PHAO 6.030 7.978 GRAD!ENT		REFERENCE DATA	5500.0000 SQ.FT 327.7800 IN 2348.0400 IN. .0125		20		Z C		20
	SREF LPEF BREF SCALE *		DZ 50.000 50.000			SREF # BREF # SCALE #						

DATE 23 MAR 76	TABU	TABULATED SOURCE	SOURCE DATA - CA23B	238					a.	PAGE 481
		ARC	ARC 14-120(CA23B)		747/1 ATI 0251 (CARRIER	ARRIER DATA)		(PNH008)	(17	0CT 75)
REFERENCE DATA	TA							PARAME TRIC	: DATA	
SREF = 5500.0000 50.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125	XMRP YMRP ZMRP	1339	.9000 IN. XC .0000 IN. YC				BETA # RUDDER # 10RB # DY		STAB ELEVON DOX	-1.000 5.000 .000.
		RN/L	= 3,35	GRADIENT INTERVAL	II	-5.00/ 5.00				
	ı	15,000 ALPHAC .000 2.000 4.000 GRADIENT	DCL 07210 08796 10421	0000 .00001 .00031 00046	06500 .06500 .06920 .07791	700 - 00358 - 00280 - 00280 - 00005	000033 .00022 .00014	DCBL . 00001 00064 00061	·	
		RN/L	3.35	GRADIENT IN	INTERVAL = -	5.00/ 5.00				•
2 0	n	30.000 ALPHAC .000 2.000 4.000 GRADIENT	DCL 05319 06087 08023	000 .00005 .00067 .0008	DCLM . 03908 . 04587 . 05020	DCY 00455 00194 00036	00039 -000039 -000013	00081 00045 00047		
		RN/L	# 3.34	GRADIENT IN	INTERVAL = -	-5.00/ 5.00				
20	•	45.000 ALPHAC .000 2.000 4.000 GRADIENT	DCL 046!4 04717 05893	000 .00001. 76000. 76000.	DCLM .02776 .03310 .03729	DCY 00327 00106 00138 00002	DCYN .00014 00022 .00000	DCBL .00061 00019 00043		
		PN/L	3.33	GRADIENT IN	INTERVAL = -	-5.00/ 5.00				
20	H	50.000 ALPHAC .000 2.000 4.000 GRADIENT	DCL 03210 04836 05571 00658	000 .00052 .00095 .00093	DCLM . D2380 . 03091 . 03328	DCY 00320 00121 00029	DCYN .00017 00025 00016	DCBL .00030 00001 0001		

SREF LREF BREF SCALE

1AR 76	TABUL	TABULATED SOURCE DATA	UAIA - CACSO	2					-	. אר	
		L	14-120(CA23B)	B) 747/1 AT1	1 0251 (CAF	O251 (CARRIER DATA)		(D. HNd)	-		
							u	PARAME TRIC	DATA		
REFERENCE DATA	ATA						4 V L J G	000	STAB =	-1.000	
5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.	XMRP YMRP ZMRP	1339	.9000 IN. XC .0000 IN. YC .7500 IN ZC				9 8 8	8 000 8 000	ELEVON		
		RN/L	3.34 0	GRADIENT INTERVAL	•	-5.00/ 5.00					
02	al .	3.500 ALPHAC . 000 2.000 4.000 GRADIENT	3655 4898 5919 0884	DCD DCL(1)00523 .16' .15' .16' .17' .19' .19' .19' .19' .19' .19' .19' .19	DCLM .16426 .17749 .19058 .00800	DCY 00372 00269 00355 00045	DCYN .00042 .00017 .00003	00004 00035 00117		·	
		RN/L =	5.30	STAUTENI INIC							
20	•	7.500 ALPHAC .000 2.000 4.000 GRADIENI	DCL -,12240 -,13962 -,15597	DCD 00384 00581 00581 00176	DCLM . 14403 . 15587 . 16492 . 00665	. 00329 00329 00275 00038	DCYN .00010 00031 .00004	DCBL .00021 00013 00077			
		RN/L	3.35	GRADIENT INTERVAL	,	5,00/ 5.00					
Z 0	•	10.000 ALPHAC .000 2.000 4.000 GRADIENT	DCL. 11033 13503 14905	000 00276 00363 00468	DCLM .12368 .14223 .14815	DCY 00549 00256 00205	DCYN .00039 00048 00001	DCBL .00060 .00009 00047			
		RN/L	3.35	GRADIENT INT	INTERVAL	-5.00/ 5.00					
Z 0		15.000 ALPHAC .000 2.000 4.000 GRADIENT	DCL 09567 11732 13451	DCD 	DCLM .10095 .11682 .12135 .00652	DCY 00554 00344 00231	DCYN .000%6 .000029 .00001	00042 .00042 .00001 00048			
		RN/L	3,35	GRADIENT INTERVAL		-5.00/ 5.00					

DCBL .00053 .00010 -.00012

00037 .00037 -.00049 -.00056

DCY -.00470 -77100. .00036

DCLM .05979 .07172 .07581

DCD -.00026 -.00013 -.00054

DCL -.06075 -.09230 -.09729

30,000 ALPHAC .000 2,000 4,000 GRADIENT

20

DATE 23 MAR 76	TABULATED	D SOURCE DATA	•	CA238					PAGE	3E 483
		ARC	14-120(CA23B)	1747/1	AT1 0251 (((CARRIER DATA)		(PNH009)	19) (17 001	(27 T)
REFERENCE DATA	ıTA							PARAMETRIC	DATA	
SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125	XMRP YMRP ZMRP	1339.9	9000 IN. XC 0000 IN. YC 7500 IN ZC				BETA RUDDER I IORB DY		STAB ELEVON BOX	-2.000 0000.0000
		RN/L =	3.34	GRADIENT IN	INTERVAL = -	-5.00/ 5.00				
Z 0	ALPHA ALPHA 000 2.00 2.00 2.00 GRADIEN	000 LPHAC .000 2.000 DIENT	DCL 05523 06879 07439	000 00024 .00002 .00023	DCLM .04414 .05318 .05527 .00421	DCY 00468 00274 00075	00036 -,00012 -,00021	DCBL .00054 .00014 00031	í	
		RN/L =	3.33	GRACIENT IN	INTERVAL = -	-5.00/ 5.00				
20	* 50.000 ALPH .0 2.0 2.0 4.0 GRADIEI	000 - 000 2 - 000 4 - 000 DIENT	DCL 04423 05593 06476 00581	000 +9000 62600 62600 19000 19000	MUDD . 03765 . 04595 . 04929	DCY 00281 00173 00032	DCYN .00006 .00026	DCBL .00012 00052 00045		
		ARC	14-120(CA23B)	747/1	AT1 0251 (C	(CARRIER DATA)		(PNH0 1 0)	0) (17 0CT	. 27 7:
REFERENCE DATA	ΤA							PARAME TRIC	DATA	
SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125	XMRP YMRP ZMRP	1339.9000 .0000 199.7500	9000 IN. XC 0000 IN. YC 7500 IN 2C				BETA RUDDER 10RB DY	0000. 0000. 0000.	STAB ELEVON BOX	5.000 .000 .600
		RN/L =	3.33	GRADIENT INTERVAL		-5.00/ 5.00				
20	ALF ALF ALF CRADI	3.500 ALPHAC .000 2.000 4.000 SRADIENT	DCL -,11286 -,15663 -,17329 -,01556	00405 00735 01171	DCLM . 18564 . 20337 . 19996	.00011 .00032 .00038 .00038	00000 - 000088 - 00060 - 00060	DCBL 00032 00085 00012		

(PNH010) (17 OCT 75)

DATA)
CARRIER
0251
A
1/27/
0 (CA238)
14-18
ARC

DATA	STAB FELEVON SON MACH				:						
PARAMETRIC	8.000 8.000		00041 00048 00008		DCBL 00041 00012 00005		DCBL 00057 00030 00048		DCBL 00032 00043 00031 00031		DCBL 00037 00023 00045
	BETA BRUDDER BIORB COT		00002 -,00037 -,00019		DCYN ,00064 ,00021 -,00001		00059 .00002 .00004 00007		DCYN .00050 00022 00032		DCYN .00049 00012 00017
		-5.00/ 5.00	,00139 ,00055 ,00089 ,00021	-5.00/ 5.00	.00243 .00107 .00107 .00155	5.00/ 5.00	02201 02066 .00019	-5.00/ 5.00	200190 -00190 -00000 -00037	-5.00/ 5.00	0CY 00251 00018 .00032
			DCLM .16198 .17688 .17015	INTERVAL	00CH 14745 15980 15151	INTERVAL = -	DCLM .11951 .13009 .12085	INTERVAL = -	DCLM .06947 .07426 .06908	ERVAL =	75400.
		GRADIENT INTERVAL	020 -,000278 -,005986 -,009946	GRADIENT IN	000 -,00200 -,00506 -,00789	GRADIENT IN	000 -,00093 -,00375 -,00604	GRADIENT IN	000 00016 00165 00307	GRADIENT INT	DCD .00022 00087 00135
	9000 IN. XC 0000 IN. YC 7500 IN ZC	* 3.32	00L - 10'462 - 13822 - 15399	3.32	DCL 10110 12613 14095	3.32	DCL 07934 10728 12250	₹ 3.33	0CT 04430 06592 081292	3.3 3	DCL -, 02266 -, 04308 -, 05672 -, 00846
⋖	XMRP = 1339. YMRP = 190.	RN/L	7.530 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	10.000 ALPHAC .000 Z.000 H.000 GRADIENT	RN/L	15.000 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	* 30.600 ALPHAC .000 2.000 7.000 GRADIENT	RN/L	- 45.003 ALPHAC .000 E.000 R.000 GRADIENT
REFERENCE DATA	SPEF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125		20		20		20		20		20

DATE 23 MAR 76	MAR 76	TABULATED SOUR	SOURCE DATA - CA	CA23B					PAGE	£83
		ARC	14-120(CA23B)	(3B) 747/1 AT1	0251	(CARRIER DATA)		(PNH010)	10) (17 OCT	15 1
	REFERENCE DATA	۲						PARAMETRIC	DATA	
SREF ** LREF ** BREF ** SCALE **	5500.0000 50.FT. 327.7800 IN. 2348.0400 IN.	XMRP « 1339 YMRP » 190 ZMRP » 190	339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC				BETA RUDDER I IORB DY		STAB ELEVON BOX	5.000 .000 .600
		RN/L	= 3.32	GRADIENT INTERVAL	u	-5.00/ 5.00				
	ZO	* 50.000 ALPHAC .000 P.000 4.000	0CL -, 02216 -, 03970 -, 04930 -, 00649	DCD . 00028 - 00069 - 00118	DCLM . 04059 . 04369 . 04075	DCY 00221 00104 .00025	DCYN .00038 00004 00062	DCBL 00021 00021 00015		
		ARC	14-120(CA23B)	38) 747/1 ATI	0251	(CARRIER DATA)		(PNH011)	(17 001	. 27
	REFERENCE DATA	Z.						PARAME TRIC	DATA	
SREF "LREF" BREF "SCALE"	5500.0000 SO.FT. 327.7800 IN. 2348.0400 IN.	XMRP = 1339 YMRP = 190 ZMRP = 190	339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC				BETA * RUDDER * 10AB * DY	00000.	STAB ELEVON BOX	-1.000 5.000 .000 .600
		RN/L	3 .34	GRADIENT INTERVAL		-5.00/ 5.00				
	20	3.500 ALPHAC .000 2.000 4.000 GRADIENT	DCL 06531 08273 09694 00859	000 . 00067 . 00098 . 00098	05315 .05315 .06314 .06641	00.4 00197 00197 00085	00009 .00008 .00008 .00034	DCBL .00027 00028 00049		
		RN/L	3.35	GRADIENT INTERVAL		-5.00/ 5.00				
	20	* 7.500 ALPHAC .000 2.003 4.000 GRADIENT	000 -,04655 -,06634 -,08388 -,01051	000 .00083 .00088 .00089	04231 .04231 .05405 .05634	00,400 -,00,406 -,00,00 -,00,00 -,00,00	DCYN .00067 .00012 .00016	DCBL .00053 00042 00064		

- CA238
DATA
SOURCE
TABULATED

4.85 8.85 8.65	r		-1.000 5.000	600										•
PAGE	100 61)		DATA STAB ELEYON	MACH		•								
	CHNG		.000 .000 .000	000		DCBL .00014 .00047 .00047		DCBL .00007 .00017		DCBL .00046 .00001		DCBL .00024 00034		DCBL .00013 00039 00013
	2		BETA * RUDDER *	• •		00049 - 000049 - 000006 - 00005		DCYN .0000 .000017			•	DCYN .000046 .00000 .00000		DCYN .00037 00012 00000
	(CARRIER DATA)				-5.00/ 5.00	7.000. 9.000. 8.2000. 9.200. 9.300.	-5.00/ 5.00	00114 00026 .00033	-5.00/ 5.00	007 - 00126 - 00126 - 00043	-5.00/ 5.00	700 - 000 99 - 000 99 - 000 99	-5.00/ 5.00	007 00257 00030 00030 00030
	747/1 ATI 0251 (INTERVAL .	0000 .04231 .05075 .05.573	INTERVAL .	DCLM .03255 .04209 .04527	INTERVAL .	DCLM . 01749 . 02622 . 02810 . 00408		DCLM .01036 .01629 .01970	•	DCLM .00792 .01311 .01731
CA238			oo ××o		GRADIENT !	000 .00116 .0094 .0099 .00018	GRADIENT II	DCD . 00145 . 00093 . 00089	GRADIENT IN	000 .00082 .00115 .00082	GRADIENT INTERVAL	000 .00055 .00079 .00098	GRADIENT INTERVAL	000 00000 000029 000088
E DATA -	C 14-120(CA23B)		.9000 IN.	r	3.33	DCL 04049 051 <i>22</i> 07970 01948	* 3.35	DCL 03786 05596 07111	3.35	DCL 01930 034457 00700	3.34	20CL -,00266 -,01583 -,02664	3.33	
ABULATED SOURC	ARC	4	XMRP = 1339 YMRP = 190		1/26	ALPHAC 10.000 PHAC 1000 PH	RNI	= 15.000 ALPHAC .000 E.000 4.000 GRADIENT	Triag	= 30.000 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	# 45.000 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	ALPHAC ALPHAC , 600 2.000 4.000 GRADIENT
2		REFERENCE DATA	5500.0000 SQ.FT. 327.7800 !N. 2348.0400 IN. .0125.			Z 0		20		2 0		2 0		20

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TABULATED SOURCE DATA - CA23B

PAGE 487	(PNH013) (17 OCT 75	PARAMETRIC DATA
IEU SOUNCE DAIA - CA238	ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)	
I CS HAR 10 HABULATED S		REFERENCE DATA

OCT 75 1		5.000 .000 .000 .000										
(17	DATA	STAB ELEYON BOX MACH				į.						
(PNH013)	PARAME TR1C	.000 .000 6.000		DCBL 00061 00057 00045		DCBL 00055 00024 00020		DCBL 00027 00043 00050		008. 00091 00047		DCBL 00054 00054 00054 00054 000024
		BETA BUDDER BIONB BUDY		00269 .00192 .00187		00248 .00248 .00202 -00007		DCYN .00221 .00206 .00190		DCYN .00190 .00182 .00171		DCYN .00108 .00075 .00075
CARRIER DATA)			5.00/ 5.00	00620 00620 00232	5.00/ 5.00	-,00547 -,00382 -,00314	5.00/ 5.00	\$1000°.	-5.007 5.00	DCY -,00346 -,00353 -,00361 -,00015	5.007 5.00	007 -,00232 -,00153 -,00097
AT1 0251 (C			1	DCLM 12845 13134 15951.	INTERVAL = -	DCLM .10666 .11059 .10776	,	DCLM 03484 13680 13660 100470	INTERVAL = -	DCLM .07532 .07970 .07931	INTERVAL = -	DCLM . 04136 . 04702 . 04717
2581 747/1			GRADIENT INTERVAL	DCD -,00088 -,00348 -,00628	GRADIENT IN	DCD 00004 00241 00450	GRADIENT INTERVAL	000 .00018 00185 00393	GRADIENT IN	000 .00073 00105 00281	GRADIENT IN	00093 .00093 00010 00120
14-1-0(CA25B)		339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC	* 3.33	00L 09258 11841 13707	3.32	000 07850 10629 12075	* 3.32	000 07292 09562 11148 00959	₹ 3.32	54600'- 24860'- 10000'-	E 3.33	000 02953 0527 07103
AHC	ď	XMRP = 1339, YMRP = 190,	RN/L	3.500 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	7.500 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	= 10.000 ALPHAC .000 2.000 4.000 GRADIENI	1/14a	# 15,000 ALPHAC .000 2.000 4.000 GRAD[E11]	REVE	4 30.000 ALPHAC .000 P.000 P.000 GRAD:ENT
	REFERENCE DATA	.0000 SG.FT. .7800 IN. 0400 IN.		20		20		20				20

ה ה	.1 75							1 75 1		5. 000. 000. 000.		
	13) (17 OCT	DATA	STAB ELEVON B DX MACH		•			(0) (17 OCT	DATA	STAB ELEVON SOLVED MACH		
	(PNH013)	PARAMETRIC			DCBL 00037 00065 00023		DCBL 00018 00002 .00006	(PNH020)	PARAME TRIC	0000		DCBL0005600056000560005600056
			BETA RUDDER : 10RB :		DCYN . 00095 . 00052 . 00025		DCYN .00094 .00052 .00021			BE TA ** RUDDER = 1 ORB ** DY **		DCYN .00131 .00089 .00080 00080
	JARRIER DATA)			-5.00/ 5.00	DCY 00315 000120 00013	5.00/ 5.00	DCY - 00294 - 00138 - 00014 - 0004	(CARRIER DATA)			-5.00/ 5.00	DCY 00190 00089 .00080
	14771 AII OESI (CARRIER			H	DCLM .02786 .03265 .03305	TERVAL = -	DCLM .02473 .02797 .02873	AT1 0251 (C			ħ	DCLM .00659 .01917 .02454 .00873
			មូម	GRADIENT INTERVAL	000 .00082 .0000.1	GRADIENT INTERVAL	DCD .00068 .00013 00035	747/1			GRADIENT INTERVAL	000 .00235 .00105 00036
1070471001-01 JOY	90000		339-9000 IN. XC .0000 IN. YC 190.7500 IN ZC	3.33	1683 3395 4956 0813	DCL 01661 03049 04225	ARC 14-120(CA23B)		.9000 IN. XC .0000 IN. YC .7500 IN ZC	≈ 3.32	DCL 04246 06645 08292	
Ž		⋖	XMRP = 1339. YMRP = 190. ZMRP = 190.	RN/L	* 45.000 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	* 50.000 ALPHAC .000 2.000 4.000 GRADIENT			XMRP # 1339. YMRP # 190.	RN/L	3.500 ALPHAC .000 2.000 4.000 GRADIENT
	1		SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125		Z Q		2 0 .		REFERENCE DATA	SREF = 5500.0000 SO.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125		20

TABULATED SOURCE DATA - CA23B
3 MAR 76

489	1 25 1		5.000 .0000 .0000 .0000										
PAGE	0) (17 OCT	DAIA	STAB ELEVON . DX MACH				÷						
	(PNH020)	PARAMETRIC	00000		DCBL 00053 00056 00082		DCBL 00084 00089 00029		0CBL000800005800058		DCBL 00074 00035 00054		DCBL 00020 00037 00030
			BETA BUDER 1000 BY BUDER 1000 BY BUDER 1000		00.00 .00084 .00071 00009		DCYN .00105 .00071 .00007-		00084 .00084 .00084 .00084		DCYN .00069 .00043 .00039		DCYN .00064 .00033 .00060
	(CARRIER DATA)			5.00/ 5.00	DCY 00197 00034 .00096	5.00/ 5.00	DCY 00080 .00082 .00082	5.007 5.00	DCY 00218 00951 00502	5.00/ 5.00	DCY 00115 00063 00013	-5.00/ 5.00	0CY 00185 00049 .00033
	0251			*	001673 .00762 .012673	INTERVAL = -	DCLM .00169 .00977 .01348	INTERVAL = -	MJD0 -,02215 -,00624 -,00998	INTERVAL = -	57,000 57,000 76100.	INTERVAL * .	DCLM -,00250 .00312 .00475
CA23B	38) 747/1 ATI			GRADIENT INTERVAL	000 .00224 .00036 .00036	GRADIENT IN	DCD .00235 .00172 .00068	GRADIENT IN	000 .00232 .00186 .00133	GRADIENT IN	000 . 00185 . 00150 . 05450	GRADIENT IN	000 .00116 .00117 .00123
CATA -	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.32	03694 -, 05098 -, 06999 -, 06999	± 3.32	DCt 03309 05628 06563	3.30	DCL 01681 04158 05537 00959	3.30	0CL 00613 03260 03460	3.30	0CL .00245 01430 02004
TABULATED SOURCE	ARC		1339.	PN/L	7,500 ALPHAC 000 2,000 4,000 GRADIENT	RN/L	10.000 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	15.000 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	30.000 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	45.000 ALPHAC . 000 P. 000 GRADIENT
TAB		ATA	XMRP YMRP ZMRP		п		•		•		•		•
MAR 76		REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.		20		20		20		20		02

DATE 23

(PNH020) (17 OCT 75)

ARC 14-120(CA23B) 747/1 ATI 02SI (CARRIER DATA)

TRIC DATA	30 STAB . 5.000 30 ELEVON		35 23 15	(PNH021) (17 OCT 75)	RIC DATA	10 STAB1.000 10 ELEVON000 10 DX000 10 MACH600		₩ © @ C:		£ ξ ΛΩ
PARAMETRIC	0000.		DCBL .00005 00036 00023	و	PARAME TRIC	0000.7		DCBL .00033 00040 00078		DCBL .00006 .00017
	BETA RUDDER I 10RB DY		DCYN .00073 .00037 .00018			BETA RODDER I TORB COT		DCYN .00125 .00051 .00056		DCYN .00095 .00052 .00073
		-5.00/ 5.00	DCY 00252 00068 00043	ATI O2SI (CARRIER DATA)			-5.00/ 5.00	DCY 00335 .00057 .00107	-5.00/ 5.00	00.7 00166 .00064 .00052
			DCLM 00156 .00380 .00491					DCLM 01013 .00511 .01119	*	DCLM 01487 00041 .00587
	. xc . xc . xc	GRADIENT INTERVAL		DCL .00665 01295 01506 00538		. xc . yc zc	GRADIENT INTERVAL	000 .00153 .00159 .00062	GRADIENT INTERVAL	DCD .00153 .00136 .00061
	9000 IN 0000 IN 7500 IN	. 3.29				9.9000 IN. Y .0000 IN. Y 0.7500 IN ZC	≠ 3.34	DCL 04918 06906 08586 09985	= 3.33	DCL 04 35 0564 07228
∢	XMRP = 1339,9	RN/L	* 50.000 ALPHAC .000 2.000 4.000 GRADIENT	AR		XMRP = 1339 YMRP = 190 ZMRP = 190	RN/L	3.500 ALPHAC .000 2.000 P.000 GRADIENI	RN/L	- 7.500 ALPHAC .000 2.000 4.000 GRADIENT
REFERENCE DATA	SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125		20		REFERENCE DATA	SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125		2 0		20

165 163 1	(27 T												
PAGE	130 (17 001	: DATA	STAB ELEVON B DX MACH		r								
	(PNH021)	PARAMETR1C	00000 0000 		DCBL .00032 .00017 00058		DCBL 00030 00036 00026		DCBL . 00054 . 000094 . 00000	a.	DCBL .00076 .00033		DCBL .00070 00050 00055
			BETA BUDER BIORB BOY		000000.		00000		DCYN .00089 .00036 .00059		DCYN .00123 .00044 .00060		OCYN .00141 .00054 .00066
	(CARRIER DATA)			-5.00/ 5.00	DCY 00197 .00075 .00013	-5.00/ 5.00	DCY 00223 00081 .00018	-5.00/ 5.00	DCY 00219 .00067 .00055	-5.00/ 5.00	DCY 00351 .00043 .00026	-5.00/ 5.00	DCY - 00414 - 00002 - 00007
	0251				DCLM 01563 00162 .00435	INTERVAL =	DCLM 01636 00211 .00299	INTERVAL =	DCLM 0:583 00563 00058	INTERVAL =	DCLM 01283 00496 00125	INTERVAL =	DCLM 01140 00438 00114
CA238	38) 747/1 ATI			GRADIENT INTERVAL	000 . 00147 . 00118 . 00505	GRADIENT IN	000 . 00151 . 00134 . 00075	GRADIENT IN	000 .00046 .00077 .00053	GRADIENT IN	0000+000000-00000000000000000000000000	GRADIENT IN	DCD 00015 .00031 .00037
DATA -	14-120(CA23B)		9000 IN. XC 0000 IN. YC	* 3.33	DCL 1,03 1,05 1,06	3.32	00C 01873 04401 06046 01111	3.34	DCL 01209 02790 u3976	3.32	70-00	± 3.3∂	00591 - 00591 - 00683 - 00784
TABULATED SOURCE	ARC		1339	1339	RN/L *			RN/L	30.000 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	45.000 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	50.000 ALPHAC .000 Z.000 4.000 GRADIENT
		Y A	XMRP YMRP ZMRP		•		•		•		ti		•
23 MAR 76		REFERENCE DATA	5500.0000 SO.FT. 327.7800 IN. 2349.0400 IN. .0125		20		20		20		20		20
DATE 23			SREF LREF BREF SCALE										

DATE 23 MAR 76

000 75 3		8. .000 .000 .000										
(17	: DATA	STAB ELEVON B DX MACH										
(PNH022	PARAME TRIC	.000 .000 8.000		DCBL 00080 00024 00035		DCBL 00052 00040 000055		DCBL00019000410004200014		DCBL - , 00074 - , 00039 - , 00050 - , 00050		DCBL 00071 00062 00051 00003
		BETA RUDDER TICRB TO DY		DCYN .00256 .00228 .00210		DCYN .00233 .00194 .00188		DCYN .00204 .00156 .00168		00247 .00247 .00195 .00172		00 YN . 00152 . 00108 . 00090
(CARRIER DATA)			-5.00/ 5.00	DCY 00410 00331 00400 0033	-5.00/ 5.00	DCY 00414 00280 00273	5.00/ 5.00	DCY 00396 00225 00170	-5.00/ 5.00	DCY -,00503 -,00284 -,00131	5.00/ 5.00	720 -,00242 -,00087 -,00002 -,000024
AT1 0251 (C			•	DCLM .12552 .13939 .14060	Ħ	DCLM .10285 .11539 .11620	INTERVAL .	DCLM .08815 .09936 .10007	INTERVAL = -	DCLM .05768 .07624 .00596	INTERVAL = -	DCLM .03361 .03923 .03821
238) 747/1		υu	GRADIENT INTERVAL	000 -,00187 -,00777 -,00777	GRADIENT INTERVAL	DCD -,00086 -,00330 -,00625	GRADIENT IN	DCD -,00020 -,00251 -,00527	GRADIENT IN	000 .00033 00166 00356	GRADIENT IN	DCD .00088 00024 00132
C 14-120(CA23B		.9000 IN. YC .0000 IN. YC .7500 IN ZC	3.31	_ onw ⊢	DCL -,09058 -,12013 -,13551	3.31	DCL -,07660 -,10898 -,12583	≖ 3.31	DCL -,05414 -,09029 -,10787	3.33	DCL -, 03403 -, 05575 -, 06841 -, 00855	
ARC		XMRP • 1339 YMRP • 190 ZMRP • 190	RN/L	3.500 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	7.500 ALPHAC .000 2.000 4.003 GRADIENT	RN/L	10,000 ALPHAC .000 2,000 4,000 GRADIENT	FN/L	15.900 AL PHAC .009 2.000 4.000 GRADIENT	RN/L	30,000 ALPHAC .000 P.600 4,000 GRADIENT
	DATA	XXX		u		•		N				įs
	REFERENCE DATA	5500.0000 SO.FT. 327.7800 IN. 2348.0400 IN.		20		20		20		20		02
		* * * *										

DATE 23 MAR 76	TABULATED	SOURCE	SOURCE DATA - CA23B	238					PAGE	493
		ARC	14-120(CA23B)	147/1	AT1 0251 (C.	(CARRIER DATA)		(PNH022)	(2) (17 OCT	1 75)
REFERENCE DATA	ΤĀ							PARAME TRIC	: DATA	
SREF = 5500.0000 SO.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE * .0125	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1339.9900 .0000 190.7500	000 IN. XC 000 IN. YC 500 IN ZC				BE1A = RUDDER = 10RB = DY	8.000 .000	STAB # ELEVON # DX MACH #	5.000 .000 .000 .600
		RN/L *	3.31	GRADIENT IN	INTERVAL = -	-5.00/ 5.00				
20	# 45.000 ALPHAC .000 2.000 4.000 GRADIENT	D0 D1 D0 D0 D0 D0 D0 D0 D0	.01693 03422 04318	DCD .00072 00011 00071	00537		DCYN .00103 .00059 .00029	DCBL 00020 .00025 .000035		
		RN/L *	3.31	GRADIENT IN	INTERVAL	-5.007 5.00				
20	AL PHAC AL PHAC .000 2.000 4.000 GRADIENT	000 .000 .000 .000	DCL 01478 03575 04217 00680	DCD .00077 00012 00036	DCLM .01739 .02149 .02153		DCYN .00093 .00052 .00058	DCBL 00036 .00012 .00005		
		ARC	14-120(CA23B)	747/1	AT1 0251 (C	(CARRIER DATA)	_	(PNH023)	23) (17 001	1 75 1
REFERENCE DATA	ΙΤΑ							PARAME TRIC	C DATA	
SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125	XMRP # ZMRP #	0. 0. 190.	.9000 IN. XC .0000 IN. YC .7500 IN ZC	0.0			BETA = RUDDER = ICR9 = DY	.000 .000 6.000	STAB ELEVON # DX MACH #	5.000. .000. .000.
		RN/L =	3.31	GRADIENT IN	INTERVAL = -	5.00/ 5.00				
20	3.500 ALPH 	PHAC .000 .000	DCL 07645 10357 11748 01021	00084 00100 00316	DCLM .07329 .07788 .07615	DCY 00347 00279 00191	DCYN .00247 .0020. .00175	DCBL00081000000005000050		

MAR 76	TABULATED SOUR	URCE DATA - C	CA238					40E	464 3
	A	RC 14-120(CA23B)	238) 747/1 ATI	0251	(CARRIER DATA)		(PNH023)	(3) (17 OCT	1.75)
REFERENCE DATA	TA T						PARAMETRIC	DATA	
5500.0000 SQ.FT. 327.7800 IN. 2340.0400 IN.	XMRP = 1339 YMRP = 190 ZMRP = 190	39.9000 IN. XC .0000 IN. YC 90.7500 IN ZC	υυ			BCTA = RUDDER = 10RB = DY	000.9	STA ELE DX MAG	5.000 .000 .000 .000
	RN/L	3.31	GRADIENT INTERVAL		-5.00/ 5.00				
20	ALPHAC .000 2.000 2.000 4.000 GRADIENT	DCL 06310 09007 10463	DCD .00141 00050 00214	DCLM .05333 .05978 .05758	DCY 00% OZ 00307 00271 0003	DCYN . 00229 . 00196 . 00188	DCBL 00072 00039 00044	ć	
	RN/L	3.31	GRADIENT 12	INTERVAL * -	-5.00/ 5.00				
Z 0	* 10.000 ALPHAC .000 2.000 7.000 GRADIENT	000 - ,05449 - ,08259 - ,09305	000 .00144 00004 00153	DCLM .054405 .05005 .00573	DCY 00407 00584 00250	DCYN . 00225 . 00193 . 00190	DCBL 00061 00068 00068		
	RN/L	3.3	GRADIENT IN	INTERVAL = -	5.00/ 5.00				
Z Q	# 15.000 ALPHAC .000 2.000 H.000 GRADIENT	00159 04159 05168 05106	000 00156 00055 00055 00051	DCLM .03035 .03581 .03733	DCY 00405 00336 00235	DCYN .00216 .00202 .00187	DCBL 00027 00050 00038		
	RN/L	3.31	GRADIENT IN	INTERVAL .	5.00/ 5.00				
20	- 30.000 ALFHAC .003 2.000 7.003 GRADIENT	DCL 02030 .04768 05462 09853	000 .00127 .00053 .00018	M100 41410. 42030. 99910.	DCY 00266 00166 00059	00000 \$6000 \$1100 \$1000	DCBL 00002 00016 00028		
	RN/L	3.3!	GRADIENT IN	INTERVAL	5.00/ 5.00				
2 0	* 45.000 ALPHAC .000 E.000 C.000 GRAD:ENT	DCL 00897 02639 03340	000 . 00125 . 00065 . 00043	965500 - 97664 - 97110 - 985100	7.00 00176 00091 00033	01000:- \$5000: \$6000:-	DCBL 00081 00007 00004		

1 75 1		5.000 .000 .000 .600			1 75 1						
~	: DATA	STAB ELEVON DX			. -	DATA	STAB ELEVON DOX MACH				
(PNHO2	PARAMETR1C	6.000		DCBL 00016 .00008 00021	PNHOS	PARAME TR10			DCBL .00021 00070 00070		DCBL .00003 00030 00051
		BETA RUDDER I		DCYN .00076 .00042 .00041			RETA RUDDER RIORB R		DCYN .00145 .00063 .00086		DCYN .00132 .00075 .0009.
ARRIER DATA			5.00/ 5.00	DCY 00164 00081 .00010	ARRIER DATA)			5.00/ 5.00	DCY 00451 00140 00068	5.00/ 5.00	DCY 00377 00215 00089
.T1 0251 (C			•	DCLM .00572 .00968 .01035	4T1 02S1 (C				DCLM .05450 .06027 .06618		DCLM .03964 .04672 .05550
1/747			RADIENT IN	000 .00109 .00064 .00049	747/1			SRADIENT IN	000 00060 00067 00238	GRADIENT IN	00000 .000000 .000029 .000188
		ZZZ	3.31	DCL 00964 03380 03380	14-120:CA23		9000 IN. XC 6000 IN. YC 7500 IN ZC	3.34 (08219 09489 11125	* 3.33	0CL 06109 08394 09993
ARC		# 1339 # 190	RN/L	50.000 ALPHAC .000 2.000 4.000 GRADIENT	ARC		# 1339. # 190.	PN/L	3.500 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	7.500 ALPHAC .000 2.000 4.000 GRADIENT
	¥	XMX YMZ ZMM		•		TA A	GMX RMY RMS		4		•
	REFERENCE DA	SREF = 5500.0000 SC.FT. LPEF = 327.7900 IN. BREF = 2348.C400 IN. SCALE = .0125		20		REFERENCE DA	SPEF = 5500.0003 SO.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125		20		2 0
	ATI 0251 (CARRIER DATA) (PNH023) (17 OCT	14-120(CA238) 747/1 ATI 0251 (CARRIER DATA) (PNH023) (17 OCT	REFERENCE DATA ARC 14-120(CA238) 747/1 AT1 0251 (CARRIER DATA) (PNH023) (17 OCT F = 5500.0000 CO.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = .000 ELEVON = 100.7500 IN. YC RUDDER = .000 ELEVON = 100.7500 IN. YC F = 2349.0400 IN. ZMRP = 190.7500 IN ZC 10RB = 6.000 DX = .000 MACH = .000	#EFFERENCE DATA ## 5500.0000 SC.FT. XMRP # 1339.9000 IN. XC ## 227.7800 IN. XC#UDER # 100.7500 IN ZC#UDER # 6.000 ELEVON # 10.25 ## 2349.0400 IN. ZMRP # 190.7500 IN ZC#UDER # 6.000 DX # 20.000 MACH # 2.01.25 ## 2349.0400 IN. ZMRP # 190.7500 IN ZC#UDER # 6.000 DX # 2.01.25 ## 2349.0400 IN. ZMRP # 190.7500 IN ZC#UDER # 6.000 DX # 2.01.25	### SECONDO CO. FT. MARP = 1339.9000 IN. XC	## SECTION NOTE	## SECRETARIO DATA ## SEC	### PREFECTOR OF THE PROPRIET OF THE PROPRETED STATES FOR THE PROPRETED	### FEFENCE DATA FREFENCE DATA FREFENCE D	## FEFENCE DATA REFERENCE DATA PARAMETRIC DATA PARAMETRIC DATA PARAMETRIC DATA PARAMETRIC DATA	### PREFERENCE DATA ### PREFE

ARC 14-120(CA23B) 747/1 ATI 0251 (CARRIER DATA)

(PNH024) (17 OCT 75)

PAGE 496

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DATA	STAB ELEVON BOX		·								
PARAMETRIC	6.000 6.000 6.000		DCBL .00045 00016 00038		DCBL .00040 00014 00014		DCBL .00004 00016 00039		DCBL .00036 00045 00037		00007 . 00007 - 00055 - 000056
	BETA RUDDER 10RB DY		DC YN . 00161 . 00109		DCYN .00146 .00110 00015		DCYN .00113 .00056 .00056		0000 00000 00000 00000 00000		DCYN .00086 .00014 .00034
		-5.00/ 5.00	DCY 00496 00199 00159	-5.00/ 5.00	DCY 00466 00278 00140	-5.00/ 5.00	DCY 00370 00105 00040	-5.00/ 5.00	0CY 00333 .00052 .00076	-5.00/ 5.00	700 00267 .00050 .00050
			DCLM .03209 .03931 .04528	*	DCLM . 02309 . 02960 . 03551 . 00453	INTERVAL = -	DCLM .00745 .01683 .02139	INTERVAL = -	DCLM .00346 .00973 .01337	INTERVAL	DCLM . 09136 . 01261 . 01261
		GRADIENT INTERVAL	00005 .00005 .000133	GRADIENT INTERVAL	000 000015 00000. 40000.	GRADIENT IN	000 00003 00000. 15000.	GRADIENT IN	DCD -,00021 -,00011 -,00024	GRADIENT IN	00013 00013 00012
	9000 IN. XC 0000 IN. YC 7500 IN ZC	* 3.33	05175 05175 07454 09403	3,32	DCL 04562 06321 07857	× 3.34	DCL -, 02051 -, 04117 -, 05510	3,32	DCL 01176 02408 03734	≈ 3.3?	DCL 00796 02128 03215
∢	XMRP = 1339, YMRP = 190.	RN/L	= 19.000 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	* 15.000 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	30.000 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	# 45.000 ALPHAC .000 2.000 4.000 GRADIENT	- 1/NA	■ 50.000 ALPHAC .000 2.000 ¥.000 GRADIENT
REFERENCE DAT	SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.C400 IN. SCALE = .0125		20		20		ZQ		20		Z G

1A - CA23B
TABULATED SOURCE DAT

TABULATED SC	OURCE ARC	DATA - CA238 14-120(CA238)	38 8) 747/1 ATI	1 OZSI (CARRIER	RRIER DATA)		(PNH025)	PAGE (5) (17 001	3E 497 CT 75 1
							PARAME TRIC	: DATA	
1339.9 0. 190.7	222	9000 IN. XC 0000 IN. YC 7500 IN 2C				BETA RUDDER IORB DY	.000 .000 8.000	STAB ELEVON BOX MACH	000.
RN/L =		3.34 6	GRADIENT INTERVAL	,	-5.00/ 5.00				
3.500 ALPHAC .000 2.000 4.000 GRADIENT		DCL 12027 12188 15207 09863	DCD 00416 00386 00592	DCLM .10446 .11722 .13218	0CY 00360 00368 00245	DCYN .00060 .00069 .00057	DCBL .00088 .00088 00028		
EN/L		3.33 6	GRADIENT INTE	INTERVAL = -5	00.5 /00.				
7.500 ALPHAC .000 2.000 4.000 GRADIENI		DCL 09543 11434 13605 01083	DCD 00268 00307 00483	DCLM . 08536 . 09970 . 11197	DCY 00457 00388 00220	DCYN .00095 .00073 .00067	00056 .00032 .00033 00033	i.	
RN/L =		3.33	GRADIENT INT	INTERVAL = -E	5.00/ 5.00				
10.000 ALPHAC .000 2.000 4.000 GRADIENT	*	DCL 07664 11259 12595 01301	DCD 00167 00268 00410	DCLM .07293 .08912 .09871	DCY -,00546 -,00171 -,00171	. 000121 . 000121 . 00063	DCBL .00034 .00006 00048		
RN/L .		3.32	GRADIENT INT	INTERVAL = -!	5.00/ 5.00				
15.000 ALPHAC .000 2.000 4.000 GRADIE:17		DCL 06696 08887 10802 01094	DCD 00107 00135 00306 00176	DCLM .05582 .06760 .07819	DCY 00479 00307 05294 20563	DCYN . 00123 . 00069 . 00121	DCBL .00031 00053 .00005		
RN/L		3,34	GRADIENT INT	INTERVAL = -	5.00/ 5.00				
30.000 ALPHAC .000 2.000 4.000 GRADIENT		DCL - 04201 - 06529 - 67749 - 09952	000 00062 00167 00167	DCLM .02872 .03956 .04578 .0659	00405 00405 00175 00109	DCYN .00115 .00060 .00079	DCBL .00024 .00006 00003		

DATE 23 MAR 76

(PNH' 25) (17 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

	0000.					17 OCT 75)				
DATA	STAB ELEVON OX MACH					_	DATA	STAB ELEVON DX MACH		
PARAMETRIC			DCBL .00032 00021 00011		DCBL .00063 .00027	(FS0H027)	PARAME TRIC	000. 8.000		DCBL .00028 00160 00016
	BETA REPUDER 10RB DY		DCYN .00084 .00012		DCYN .00115 .00041 .00027	•		BETA BUDDER BUDDER BUDY		DCYN .03286 .00190 .00182
		-5.00/ 5.00	DCY 00328 00002 000031	-5.00/ 5.00	DCY 	747/1 ATI 0351 (CARRIER DATA)			-5.00/ 5.00	DCY 00787 00159 00398
			01714 .02430 .02430 .02650		DCLM . 01517 . 02509 . 02432	AT1 0351 (C.				DCLM 113402 114247 114357 00663
		GRADIENT INTERVAL	000 00073 00055 001620	GRADIENT INTERVAL	DCD 00086 00072 00110				GRADIENT INTERVAL	DCD 00239 00374 00744
	339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC	* 3.32	DCL 02757 04018 05563 00769	3.32	DCL -, 02328 -, 03329 -, 04848 -, 00698	ARC 14-120(CA23B)		339.9000 IN. XC .0000 IN. YC 90.7500 IN ZC	± 3.29	DCL -,10338 -,11590 -,13498 -,00785
4	XMRP = 1339.	RN/L	# 45.000 ALPHAC .000 Z.000 H.000 GRADIENT	RN/L	* 50,000 ALPHAC 000 P,000 H,000 GRADIENT	ARC	4	XMRP # 1339. YMRP # 190.	RN/L	* 3.500 ALPHAC .000 2.000 4.000 GRADIENT
REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.		2 0		Z G		REFERENCE DATA	5500.0000 50.FT. 327.7800 IN. 2348.0400 IN. .0125		2 0
	SREF ** LREF ** BREF ** SCALE **							SREF ** LREF ** BREF ** SCALE **		

DATE 23 MAR 76		REFEREN	SREF = 5500.0000 SC LREF = 327.7800 IP BREF = 2348.0400 IP SCALE = .0125			OF OF	RIGINAL' P. POOR QU						
143		REFERENCE DATA	SO.FT. XM IN. YM IN. ZM		. 20		. 20		, ZQ		. 20		. 20
TABULATED SOURCE	ARC		YMRP = 1339,9000 YMRP = 190,7500 ZMRP = 190,7500	RN/L ,	7.500 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	ALPHAC ALPHAC .000 2.000 4.000 GRADIENT	RN/L	15.000 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	30.000 ALPHAC .000 2.000 4.000 GRADIENT	RN	# 45.000 ALPHAC .000 2.000 4.009 GRADIENT
DATA -	14-120(CA23B)		.0000 IN. YC .0000 IN. YC .7500 IN ZC	3.29 (0CL 08771 10785 12598 00952	3.29 (DCL 7,07759 -,10396 -,12214	3.29	DCL -,06292 -,087.62 -,15401	3.29	63462 05006 07095	3.30	DCL 01241 03534 04534 06536
CA23B	1/41/			GRADIENT INTERVAL	000 00118 00512	GRADIENT INT	000 - 00037 - 00577 - 00588	GRADIENT IN	000 . 00009 60009 17803	GRADIENT IN	000 .00033 .0009. .00169	GRADIENT IN	0000 . 00004 00058 00116
	AT1 0351 (C/				DCLM .11286 .12189 .12152	INTERVAL .	M.120 480901. 480901.	INTERVAL = -	07802 .07802 .08403 .08453	INTERVAL = -	DCLM .04236 .04761 .04605	INTERVAL = -	DCLM . 02536 . 03009 . 02991
	0351 (CARRIER DATA)			5.00/ 5.00	DCY -,00540 -,00287 -,00323	-5.00/ 5.00	00385 -, 00415 -, 004066 -, 000006	5.00/ 5.00	DCY 00317 00323 00146	5.00/ 5.00	DCY 00213 00173 00001	5.00/ 5.00	DCY 00124 00003 000096
			BETA RUDDER 10R8 DY		DCYN .00224 .00182 .00174		DCYN .00190 .00190 .00174		DCYN .00165 .00130 .00118		DCYN .00106 .00081 .00087		00057 .00057 .00005 .000054
	(PNH027)	PARAMETRIC	8.000 000		DCBL 00025 00072 00013		DCBL 00063 .00011 00007		0CBL -, 00079 -, 00079 -, 000070		DCBL 00060 00007 00015		0081 00066 00002 00003
PAGE	7) (17 OCT	DATA	STAB ELEVON : DX MACH :		ι								
# 199	T 75 1												

1 27		5.000 .000 .000 .000			15 1		5.000.			
71 ' 17 OCT 75	DATA	STAB ELEVON BOX BACH			(4) (17 OCT	DATA	STAB ELEVON BOX			
(PNH027)	PARAME TRIC	000. 0000. 8		DCBL 000046 000021 000024 00002	(PNH034)	PARAMETRIC DATA	000.		DCBL 00009- 000542- 00042-	
		BETA RUDDER 10RB DY		DCYN .00050 00003 .00014			BETA RUDDER I 10PB		DCYN 00007 00020	
747/1 ATI 0351 (CARRIER DATA)			-5.00/ 5.00	007 00182 00084 . 00032	747/1 ATI O3SI (CARRIER DATA)			-5.00/ 5.00	DCY - 00027 - 00123 - 00152	-5.00/ 5.00
AT1 0351 (C				DCLM . 02664 . 02725 . 02647	AT1 0351 (C				DCLM .07949 .08225 .07967	н
			GRADIENT INTERVAL	000 00018 00069 00071				GRADIENT INTERVAL	000 .00069 00157 00323	GRADIENT INTERVAL
ARC 14-120(CA23B)		1339,9000 IN. XC .0000 IN. YC 190.7500 IN ZC	3.30	DCL 02333 03986 05408	ARC 14-120(CA238)		1339.9000 IN. XC ,0000 IN. YC 190.7500 IN ZC	3.29	DCL 09176 10280 12045 	3.29
ARC		и и и	RN/L	50.000 ALPHAC .000 2.000 4.000 GRADIENT	ARC			RN/L	3,500 ALPHAC .000 2.000 4.000 6PAD:ENT	PN/L
	TA	XMRP YMRP ZMRP		н		TA.	XMRP YMRP ZMRP		N	
	REFERENCE DATA	5500,0000 SQ.FT. 327,7800 IN. 2348,0400 IN.		20		REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.		Z 0	
		SREF LREF BREF SCALE					SREF # LREF # BREF # SCALE #			

DCBL -.00076 -.00022 -.00018

00027 .00027 .00039 .00039

DCY -.00017 .00033 .00004 -.00031

DCLM .05986 .05549 .06298

000 .00127 -.00060 -.00237

7.500 ALPHAC .000 2.000 4.000 GRAD!ENT

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: 501	(27)												
PAGE	14) (17 OCT	DATA	STAB ELEVON DX MACH										
	(PNH034)	PARAME TRIC			DCBL 00038 00027 000024		DCBL 00075 00066 00027		DCBL 00085 00026 00057		90000. - 90005. - 90000.		DCBL - 00019 - 00011
			BETA RUDDER I IORB DY		DCYN . 00050 . 00060		DCYN .00099 .00094 .00106		DCYN .00033 .00012 .00056		0.000		47000. 05000. 90000.
	(CARRIER DATA)			-5.00/ 5.00	DCY 00091 00034 00037 00022	5.00/ 5.00	DCY 00166 00043 00025	5.00/ 5.00	DCY .00039 .00071 .00003	-5.00/ 5.00	00050 .00050 .00052 .00061	-5.00/ 5.00	720 - 50100. - 50000. - 60081
	AT1 0351 (C.			INTERVAL = -	M100 .05368 .0580 .0568 .0568	INTERVAL = -	DCLM .04150 .04577 .0486	INTERVAL = -	DCLM .02861 .02591 .02591 .02491	INTERVAL = -	01704 01704 01739 00539	INTERVAL	DCLM . 01254 . 01522 . 01522
CA238	1747/1			GRADIENT INT	DCD .00118 .00051 -00051 .00185	GRADIENT IN	0000 .00000 .00000 00107	GRADIENT INT	DCD .00127 .00034 .00018	GRADIENT IN	000 .00096 .00019 00018	GRADIENT IN	300 9000:- 2000:- 2000:-
DATA -	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.29	DCL 05867 09956 01020	3.29	DCL - 05107 - 06975 - 08365 - 00810	3.23	DCL 02784 04641 05579	≈ 3.30	002-0 -, 012-0 -, 02912 -, 03941 -, 03645	3.3 0	. 0.1233 0.1233 0.3397 0.3397
ATED SOURCE	ARC		. 1339,9000 . 0000 . 190,7500	RN/L	10.000 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	15.000 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	30.000 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	45.000 ALPHAC .009 2.530 4.000 GRADIENT	PN /L	50.000 ALPHAC .000 2.000 4.000
TABULATED		₹	XMRP YMRP ZMRP		и		•		Ħ		n		
		ENCE DATA	50.FT.		. 20		20	٠	20		20		20

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DATE 23 MAR 76

SREF "LREF" BREF "SCALE"

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7/1 AT1
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4-120(CA
ARC

(FNH035) (17 OCT 75)

PAGE 502

	6000 0000 0000 0000										
DATA	STAB ELEVON DX MACH				·						
PARAME TRIC			DCBL 00108 00039 00051		DCBL 00101 00042 00079		DCBL 00039 00049 00075		DCBL 00093 00011		OCBL 00012 00004 00018
	BETA RUDDER 10RB DY		. 00122 . 00122 . 00117		DCYN .00133 .00104 .00127		DCYN .00129 .00137		00152 .00152 .00141 .00157		00057 .00057 .00060
		5.00% 5.00	DCY 05077 00193 00033	5.00/ 5.00	DCY 00096 00087 00068	5.00/ 5.00	DCY 00140 00015 00042	5.00/ 5.00	7000°- 82000°- 26000°- 26000°- 26000°- 26000°-	5.00/ 5.00	DCY 00009 00125 00094
		TERVAL * -5	ОССМ . 01200 . 02536 . 02715	INTERVAL = -5	DCLM .00436 .02134 .02134	INTERVAL = -5	DCLM .00295 .01516 .01796	INTERVAL = -5	DCLM .00012 .01242 .01491	INTERVAL = -5	DCLM 00353 .00508 .00508
		GRADIENT INTERVAL	000 . 00248 . 00013	GRADIENT IN	000 . 00258 . 00116 . 00029	GRADIENT IN	00231 .00231 .00115 .00024	GRADIENT IN	002 . 00214 . 00130 . 00056	GRADIENT IN	00140 . 00140 . 00080 . 00057
	9000 IN. XC 0000 IN. YC 7500 IN ZC	3.29	DCL 05055 07181 08455	3.29	DCL 03392 06000 07521	≈ 3.29	0CL -, 02751 -, 05020 -, 06614 -, 00961	3.29	000 -,02052 -,04170 -,05669	= 3.29	DCL 00986 02676 03267
	XMRP = 1339. YMRP = 190.	RN/L	* 3.500 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	7.500 ALPHAC .000 2.000 4.000 GRADIENT	RN/L :	ALPHAC ALPHAC .000 2.000 4.000 GRADIENT	RN/L .	* 15.000 ALPHAC .000 2.000 P.000 GRADIENT	PRVL :	= 30.000 ALPHAC .000 R.000 4.000 GRADIENT
REFERENCE DATA	500.0000 SQ.FT. XI 327.7800 IN. YI 348.0400 IN. ZI		20		. 20		. 20				ZO

DATE 23 MAR 76	TABULATED	ATED SOURCE	: DATA - CA238	338					PAGE	E 503
		ARC	14-120(CA23B)	747/1	AT1 0351 (C.	(CARRIER DATA)		(PNH035)	(5) (17 OCT	t 75)
REFERENCE DATA	ΤA							PARAMETRIC	: DATA	
SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125	XMRP XMRP	1339	.9000 IN. XC .0050 IN. YC .7500 IN ZC				BETA	000	STAB ELEVON # DX MACH #	5.000
		BN/I	= 3.30 (GRADIENT IN'	INTERVAL = -	5.00/ 5.00				
20	al	45.000 ALPHAC .000 2.000 4.000 GRADIENT	001 .00108 02278 02533	000 . 000121 . 00041 . 00029	DCLM . 00477 . 00411 . 00499	DCY .00043 .00074 .00124	00032 00003. 000000. 0000000000000000000	DCBL 00054 00054 00020 00000		
		RN/L	≈ 3.30 (GRADIENT IN	INTERVAL = -	5.00/ 5.00				
20	H	50.000 ALPHAC .000 2.000 4.000 GRADIENT	DCL .00492 02260 02448	000 . 000121 . 000031 . 50000.	DCLM 00517 .00449 .00491	DCY .00071 .00034 .00106	DCYN .00033 .00038 .00033	DCBL 00094 00074 00024		
		ARC	14-120(CA23B)	747/1	AT1 0351 (C	(CARRIER DATA)		(PNH036)	35) (18 MAR	R 75)
REFERENCE DATA	Y.							PARAME TRIC	DATA	
SREF = 5500.0000 SO.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125	XMRP YMRP ZMRP	1339	1.9000 IN. XC 1.0000 IN. YC				BETA RUDDER RIDORIB DY	.000 10.000 6.000	STAB ELEVON BOX	5.000 .000 .000 .600
		PN/L	3.31	GRADIENT IN	INTERVAL * -	-5.00/ 5.00				
20	н	3.500 ALPHAC 2.000 4.000 GRADIENT	50L 09419 10989	000 00025 00200 00200	DCLM .08192 .07581	000 . 02635 . 02962 54100.	DCYN 01726 01764 00020	DCBL . 00277 . 00324 . 00018		
		RN/L	= 3.30	GRADIENT IN	INTERVAL = -	-5.00/ 5.00				
20	u	7.500 ALPHAC A.000 4.000 GRAD;ENT	00L 08020 0858 01275	000 .00036 00089	DCLM .06576 .06187	DCY .02823 .00038	DCYN 01815 01832 09009	DCBL .00296 .00284 .00012		

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PAGE 5 :	MAR 76)		ະ 000. 000. 000.										
ď	81 >	: DATA	STAB ELEVON : DX MACH :		·								
	(PNH036)	PARAMETR1C	. 000 6. 000 6. 000		DCBL .00323 .00344 .00005		DCBL . 00354 . 00325 00020		DCBL .00401 .00374 00020		DCBL . 00439 . 00382		DCBL .00395 .00374 00016
			BETA RUDDER 1 10RB 1		DCYN 01848 01847 00000		DCYN 01873 01868		DCYN 02057 02037		DCYN - 02106 - 02108 - 00002		DCYN 02113 02093
	(CARRIER DATA)			-5.00/ 5.00	DCY .02850 .02973	-5.00/ 5.00	DCY .02887 .03031	-5.00/ 5.00	DCY .03170 .03291	-5.00/ 5.00	03214 03458 03458 00101	-5.00/ 5.00	DCY .03181 .03429 .00103
	AT1 0351 ((DCLM .05972 .05734 .00693		DCLM .04830 .04530	INTERVAL = -	DCLM .02941 .02913	#	DCLM .01978 .02071	INTERVAL = -	.02120 .02120 .01916
CA23B	238) 747/1		OO	GRADIENT INTERVAL	000 .00062 .00048	GRADIENT INTERVAL	000 .00105 .00042	GRADIENT IN	000 00121 00113	GRADIENT INTERVAL	DCD .00107 .00124	GRADIENT IN	000 .00105 .00154 .00399
CE DATA - C.	C 14-120(CA23B)		.9000 IN. XC .0000 IN. YC .7500 IN ZC	3.30	DCL 07242 09137	3.30	DCL 06024 07264 00876	3.29	DCL ~.03298 04568 00891	3.29	DCL 02449 03794	* 3.30	DCL 03181 02547 .00061
TABULATED SOUR	AR	-	XMRP = 1339 YMRP = 190 ZMRP = 190	RN/L	# 10,000 ALPHAC 2,000 4,000 GRADIENT	RNYL	* 15.090 ALPHAC 2.000 4.900 GRADIENT	RN/L	* 30.000 ALPHAC 2.000 4.000 GRADIENT	PN/L	* 45.000 ALPHAC 2.000 4.000 GRAD!ENT	R11/L	# 50.000 ALPHAC 2.000 4.000 GRADIENT
MAR 76		REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.		2 0		ZQ		Z 0		Z 0		20

õ	TABUI	TABULATED SOURCE	DATA -	CA23B					0	202
		ARC	14-120(CA239)	747/1	A11 0351 (C	(CARRIER DATA)		(PNH037)	(17	7
REFERENCE DATA	ΤA							PARAMETR1C	DATA	
0000 SQ.FT. .7800 IN. 0400 IN.	XMRP YMRP ZNRP	# 1339. # 150.	9000 IN. XC 0000 IN. YC 7500 IN 2C				BETA RUDDER 1 10RB 1	000. 0000. 9	STAB • ELEVON • DX •	000.1-
		RN/L .	3.32	GRADIENT IN	INTERVAL = -	5.00/ 5.00				
20	μ	3.500 ALPHAC .000 2.000 M.000 GRADIENT	00L 07554 09217 11111	000 11000 11001	DCLM .06014 .06501 .06508	DCY 00285 00125	00000 · 000000 · 000000 · 000000 · 000000	DCBL 00011 00041 00081		
		RN/L =	3.32	GRADIENT IN	INTERVAL = -	5.00/ 5.00				
2 0		7.500 ALPHAC .000 2.000 4.000 GRADIENT	DCL 05948 07667 09551	95000; - 95000; - 16100;	DCLM .04779 .04979 .05515	DCY -,00458 -,00231 -,00248	DCYN . 00143 . 00091 . 00129	0CBL 00021 00085 00097		
		RN/L .	3.31	GRADIENT IN	INTERVAL = -	5.00/ 5.00				
20	•	10.000 ALPHAC .000 2.000 4.000 GRADIENT	DCL 05398 07864 08896	0000. 9000. 91000.	DCLM . 01-192 . 04670 . 05046	DCY 001+35 00325 00022	DCYN .00145 .00139 .00145	DCBL 00034 00020 00077		
		RN/L =	3.3!	SPADIENT IN	INTERVAL = -	5.00/ 5.00				
2 0 .	•	15.000 ALPHAC .500 2.000 M.000 GRADIENT	DCL C4 179 0674 1 080 17	000 00062 00063 00016	DCLM . 03251 . 03683 . 04108	DCY 00487 00310 00381	DCYN . 00175 . 00139 . 00173	208: 00086 00088 0018	٠.	
		PRVL =	3.32	GRADIENT INT	INTERVAL = -	5.00/ 5.00				
Z Q	H	30.000 ALPHAC .000 2.000 4.500 GRADIENT	DCL 02542 04793 5420 5655	02360 8,000 9,000 1,000	DCLM .01381 .02198 .02471	DCY 00411 00158 00213	DCYN .00112 .00086 .00086 	80000.1 84000.1 84000.1 84000.1		

ORIGINAL PAGE IS OF POOR QUALITY (PNH037) (17 OCT 75)

CATA
CARRIER DA
0351
747/1 AT
14-120(CA23B)
ARC 1

	-1.000 .000 .000 .600					1 75 1		5.000 5.000 .000		
DATA	STAB ELEVON * DX MACH *					B) (17 OCT	DATA	STAB # ELEVON # DX #ACH #		
PARAMETR10	6.000		00000. - 000034 - 000034 - 000000.		DCBL .00025 00033 00054	(PNH038)	PARAME TRIC	.000		DCBL 00035 00038 00045
	BETA - RUDDER - 10RB - DY		000088 .000088 .000033		DCYN .00092 .00017 .00023			BE.TA ** RUDDER ** ICRB ** DY **		DCYN 00047 00054 00054
		-5.00/ 5.00	DCY 00306 00120 00123	-5.03/ 5.00	DCY 000436 00063 00063	RRIER DATA)			-5.00/ 5.00	DCY . 00063 . 00205 . 00289
		n	DCLM . 01040 . 01248 . 01541		DCLM .00546 .01208 .01478	ATI 0351 (CARRIER				DCLM .13998 .13637 .13084 .00196
		GRADIENT INTERVAL	00035 00035 00030 00017	GRADIENT INTERVAL	000 00001 .00025 .00037	1/44			GRADIENT INTERVAL	DCD 00377 00339 00607
	1000 IN. XC 1000 IN. YC 1500 IN ZC	3.32	DCL .02878 .02746 .03119	* 3.31 G	DCL 01066 02716 03250	ARC 14-120(CA23B)		.9000 IN. XC .0000 IN. YC	3.33	DCL 08708 11473 13275
	. 1339,9000 	RN/L	45.000 ALPHAC .000 2.000 4.000 GRADIENT	RN/L.	50.000 ALPHAC .000 2.000 4.000 GRADIENT	ARC		# 1339 # 190	RN/L :	3.500 ALPHAC 000 2.000 4.000 GRADIENT
TA	XMRP YMRP ZMRP) i		я		LTA.	XMRP YMRP ZMRP		W
REFERENCE DATA	5500,0000 SQ FT. 857,0000 IN. 847,0000 IN.		20		20		REFERENCE DATA	5550,0900 50,FT. 327,7800 IN. 2348,0400 IN.		20
	SREF FREF BREF SCALE **							CAREF BREF SCALE		

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TABULATED SOURCE DATA - CA23B

PAGE 507	(17 OCT 75)	⋖	STAB . 5.000 ELEVON . 5.000 DX . 000 MACH . 600										
	(PNH038)	PARAMETRIC DATA	. 000 STAB . 000 ELEVG 5.000 DX		DCBL 00056 00057 00084 00015		DCBL 00073 00057 00066		OCBL 00065 00053 00038 00001		DCBL 00028 00002 00004 00002		DCBL -,00072 -,00071 -,00041
			BETA # RUDDER # 10RB # 0Y		DCYN . 00024 . 00033		DCYN . 00042 . 00015 00016		DCYN .00035 .00009 .00009		DCYN .00056 .00014 .00023		DC VN .0000. .0000.30 .0001.3
	(CARRIER DATA)			-5.00/ 5.00	DCY 00034 .00114 .00235	-5.00/ 5.00	.00020 .00077 .00158	-5.00/ 5.00	DCY 000043 .000080 .00071	-5.00/ 5.00	.00145 00145 00053 00053	-5.00/ 5.00	00000. -, 00105 -, 009105 -, 00900.
	AT1 0351 (DCLM 11742 11315 10865	INTERVAL =	DCLM . 10403 . 10403 . 00920	INTERVAL =	DCLM .08978 .09484 .07967	INTERVAL =	DCLA 47440. 47440. 47440.	INTERVAL = .	DCLM .02808 .03038 .02903
CA23B	1747 (BE			GRADIENT INTERVAL	000 - 00041 - 00246 - 00474	GRADIENT IN	DCD 00024 00199 00417	GRADIENT IN	000 -,00042 -,00154 -,00325	GRADIENT IN	00031 .00072 00177	GRADIENT IN	00037 00037 00079
DATA -	14-120(CA23B		.9000 IN. XC .0000 IN. YC .7500 IN ZC	= 3.33	DCL -, 07588 -, 09462 -, 11251 -, 00911	* 3.33	000 06771 10664 10664	3.32	DCL 07253 07898 08683	3.32	DCL 02582 04724 06749	3.3!	DCL -, 01064 -, 03323 -, 04279 -, 00798
TABULATED SOURCE	ARC	⋖	XMRP = 1339. YMRP = 190.	RN/L	7.500 ALPHAC .000 2.000 4.000 CRADIENT	RN/L	* 10.000 ALPHAC .000 2.000 4.000 GRADIENI	RN/L	* 15.000 ALPHAC .000 2.000 4.000 GRADIENI	RN/L	* 30.000 ALPHAC .000 2.000 4.000 GRADIENT	RN/L	* +5.000 ALPHAC .000 2.000 4.000 GRADIENT
. MAR 76		REFERENCE DATA	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.		20		20		Z 0		22		2 C

TABULATED SOURCE DATA - CA238

UAIL 63 MAR 75	TABULATED SOURCE DATA - CA238	PAGE 508
	ARC 14-120(CA23B) 747/1 ATI 03SI (CARRIER DATA)	DATA) (PNH038) (17 OCT 75)
REFERENCE DATA	ATA	PARAMETRIC DATA
SPEF = 5500.0000 SO.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .00125	XMRP = 1339.9000 IN. XC YMRP = .0000 IN. YC ZYRP = 190.7500 IN ZC	BETA000 STAB . 5.000 RUDDER000 ELEVON . 5.000 10RB . 6.000 DX000 DY000 MACH600
	RN/L = 3.30 GRADIENT INTERVAL = -4 00 F 00	C C

	ະ ເຄີຍ 000. 000. 000. 000.			001 75)								
DATA	STAB ELEVON = DX MACH =			(17	DATA	STAB E ELEVON D DX MACH E		4				
PARAMETRIC	000.		DCBL	(PNH039	PARAME TRIC	10.000		DCBL .00238 .00274 5.000.2		DCBL 00323 00563 00556		DCBL .00325 .00310 00013
	BETA BRUDDER BIORB BOY		DCYN .00045 .00012 .00020			BETA ** RUDDER ** LORB **		DCYN 01727 01732 00003		DCYN 01852 01928		DCYN -, 01983 -, 01964 -, 00021
		-5.00/ 5.00	050 - 000048 - 00017 - 00020 - 00019	(CARRIER DATA)			-5.00/ 5.00	.03003 .03067 .03067	5.00 5.00	007 03185 03453 00118	-5.00/ 5.00	707 .03435 .03437 .00685
		ıı	DCLM .02507 .02605 .02577	AT1 0251 (C.			н	DCLM .12847 .13084	INTERVAL = -	DCLM .11360 .10793	INTERVAL 5	0001 10874 00901 00625
		GRADIENT INTERVAL	DCD .00056 00010 00070	747/1			GRADIENT INTERVAL	000 00315 00572 00546	GRADIENT INT	DCD 00208 00371	GRADIENT INT	DCD 00132 00319
	39.9000 IN. XC .0000 IN. YC 90.7500 IN ZC	3.30	DCL 00820 02403 04647 04647	ARC 14-120(CA23B)		1339.9000 1N. XC .0000 1N. YC 190.7500 1N ZC	3.35	OCL 11837 13802 01239	3.34	DCL 10278 11473 00853	3.34 (000 11934 11934 01539
	XMRP = 1339 YMPP = 190	RN/L	50.000 ALPHAC .C50 ?.000 4.000 GRADIENT	ARC		XMRP * 1339. YMRP * 190. ZMRP * 190.	FN/L	3.500 ALPHAC 2.000 4.000 GRAD!ENT	PHAL	7.800 8.800 8.000 9.000 9.000 9.000 9.000 9.000 9.000 9.000		0000 E 01000 E 0100 E 0100 E 0100 E 000 E
	SPEF = 5500,0000 S0,FT, XF LREF = 327,7800 IN. YF BREF = 2348.0400 IN. ZF SCALE = .0125		x 20		REFERENCE DATA	SREF = 5500.0000 SQ.FT, XM LREF = 327.7800 iN, YM BREF = 2348.0400 iN, ZM SCALE = .0125		. 20		20		* 2G

DATE 23 MAR 76 T	TABULATED	TED SOURCE DATA - CA23B ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER	(CARRIER DATA)		(PNH039)	PAGE (9) (17 CCT	509
٠ ۲	1						
FT.	XMRP YMRP ZMRP	* 1339-9000 IN. XC = .0000 IN. YC = 190.7500 IN ZC		BETA RUDDER 10RB DY R	6.000	STAB ELEVON : DX MACH :	5.000 5.000 .000 .600
		RN/L = 3.34 GRADIENT INTERVAL =	-5.00/ 5.00				
20	И	15.000 DCL DCD DCLM 2.000078/700070 .08259 4.0000992600198 .07973 GRADIENT01280 .00311 .00668	007 03341 03341 04000.	DCYN 02023 02031 00005	DCBL .00381 .00353	•	
		RN/L = 3.33 GRADIENT INTERVAL =	-5.00/ 5.00				
20	н	30.000 DCL DCD DCLM 2.00005492 .00039 .04813 H.0000525400009 .04576 GRADIENT00592 .00351 .00593	DCY 3 .03495 6 .03686 3 .00075	DCYN 02143 02161	DCBL .00401 .00440		
		RN/L = 3.33 GRADIENT INTERVAL =	-5.00/ 5.00				
20	#	45.000 ALPHAC DCL DCD DCLM 2.00003315 .fu061 .03364 4.00004841 .00054 .03150 GRADIENT01019 .00372 .00854	DCY 0.03538 0.03631 0.00025	DCYN 02159 02146	DCBL . 00410 . 00366 00028		
		RN/L = 3.33 GRADIENT INTERVAL =	-5.00/ 5.00				
20	n	50.000 DCL DCD DCLM 2.00003217 .00067 .02842 H.00104520 .00059 .02814 CPADIENT00907 .00371 .00814	DCY . 03464 7 . 03622 4 . 00058	DCYN 02142 0215150	DCBL .00403 .00384 000).		

(PNHO40)	
CARRIER CATA)	
747/1 ATI O2SI (CARRIER DATA)	
ARC 14-120(CA238)	

(17 OCT 75) PAGE 51.

PEFERENCE DAT. 327.7800 IN. 337.7800 IN. 3348.0400 IN0125 DZ DZ DZ	XMRP = 1339 YMRP = 1900	9000 IN 10000 I	3 GRADIENT INTERVAL 5000111 .06 5300045 .07 5100245 .07 51002181 .06 52000131 .06 53000139 .05 5400137 .05 5500138 .00 5600138 .00 5700139 .00 5800139 .00 5800199 .00 5900199 .00	######################################	-5.00/ 5.00 -5.00/ 5.00 -5.00/ 5.00 -5.00/ 5.00 -5.00/ 5.00 -5.00/ 5.00 -5.00/ 5.00 -5.00/ 5.00 -5.00/ 5.00	BETA = RUDDER = DCYN - 000034 - 0000334 - 000033 - 000066 - 000066 - 000066 - 000011 - 000063 - 000060 - 000000060 - 000060 - 000060 - 000060 - 000060 - 0000060 - 000060 - 00	DCBL - 0000 59 - 0000 59 - 0000 59 - 0000 59 - 0000 59 - 0000 59 - 0000 59 - 0000 59 - 0000 59 - 0000 55 -	STAB STAB ELE VCN MACH
20 2		DCL 04724 05289 07027 00571	DCD .00100 .00030 00087 .00223 GRADIENT IN	DCLM .03787 .03787 .03968 3 .00469 INTERVAL = -	DCY .00174 .00249 .00271 00015	DCYN 00073 00056 00044	- 00072 - 00072 - 00038 - 00038	
70	# 30.000 # ALPHAC 2.000 P.000 9.000 GRADIENT	DCL 02835 03651 04987 00533	000 .00075 .0000.1 .0000.7	DCLM. .01899 .02112 .02163	007 . 00121 . 00143 . 00088	DCYN 00005 00013 .00023	CCBL 00062 00008 00017	

)E 51ê	(57 1)	,	5.000 5.000 .000 .600										
PAGE	0) (17 0CT	DATA	STAB ELEVON DX		·								
	(PNHX10)	PARAMETRIC	9.000 		DCBL 00012 .00009		DCBL -,00030 -,00048		DCBL 00043 00030		CCBL -,00022 -,00042		DCBL 00021 00015 00003
	~		BETA RUDDER 10RB DY		DCYN 00017 .00001		DCYN .00006 .00018		DCYN 00021 00031 00006		DCYN 00011 00016		DCYN 00003 00010
	CARRIER DATA)			-5.00/ 5.00	0CY .00098 .00150	-5.00/ 5.00	DCY 00075 00016	-5.00/ 5.00	DCY .00001 .00035	-5.00/ 5.00	DCY 00020 00031	-5.00/ 5.00	DCY 00105 .00024 .00044
	ATI 0251 (CARRIER				DCLM .15970 .15154	**	DCLM .12997 .12083	H	DCLM .07421 .06909 .05555	INTERVAL = -	M100 M100 M100 M100 M100 M100 M100 M100	Ħ	00.00 0.0058 0.0058 0.0058
CACSE	1/27 (822)		υ υ	GRADIENT INTERVAL	DCD 00505 00787	GRADIENT INTERVAL	000 00374 00601	GRADIENT INTERVAL	DCD 00163 00304	GRADIENT IN	DCD 00086 00135	GRADIENT INTERVAL	DCD 00069 00114
14-120(C			.9000 IN. XC .0000 IN. YC .7500 IN ZC	= 3.33	0	3.35	DCL 10734 12231 01004	* 3.35	DCL 06579 08112	3.35	DCL 04294 05651 00934	3.35	DCL 03965 04817 00681
ישפער אונים אספעי	ARC	⋖.	XMRP = 1339 YMRP = 190	RN/L	* 10.000 ALPHAC A.000 4.000 GRADIENT	RN/L	7 15.900 ALPHAC 2.000 4.000 GRADIENT	RN/L	30.000 ALPHAC 2.000 9.000 GRADIENT	RN/L	= 45.000 ALPHAC 2.000 4.000 GRADIENT	吊なくし	= 50.000 ALPHAC 2.000 4.000 GRADIENT
		PEFEPENCE DATA	SPEF = 5500.0000 SO.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = 0.0125		20		Z 0		ZG		ZC		20

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SREF = LREF = BREF = SCALE =

ARC 14-120(CA23B) 747/1 ATI 0251 (CARRIER DATA)

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CT 75		8.00.0 .000.0 .000					OCT 75)		5.000 5.000 10.000				
13) (17 OCT	DATA	STAB ELEVON # DX MACH #					(17	DATA	STAB ELEVON BOX				
(PNHX13)	PARAMETRIC	000. 6.000		DCBL 00064 00064		DCBL 00004 .00005	(PNHX14)	PARAME TRIC	000.		DCBL 00047 00062		96000. 000096 000096
•		BETA # CONDER # TORB # DY		00050 00050 00050 000013		DCYN .00050 .00020 -			BETA R RUDDER E TORB E DY		DCYN .00295 .00275 -		DCYN , 005.94 , 0000
(CARRIER DATA)			-5.00/ 5.00	DCY 00111 00009	-5.00/ 5.00	7.00 00133 00016	(CARRIER DATA)			-5.00/ 5.00	PCY - 00409 - 00386	-5.00/ 5.00	00.7 00379 00328 .00005
747/1 AT1 0251 (NTERVAL .	DCLM .03266 .03283	NTERVAL =	DCLM .02780 .02850 .06847	AT1 0251			NTERVAL #	DCLM .13250 .13015	NTERVAL =	DCLM .15559 .15729 .0896
		Q Q	GRADIENT INTERVAL	DCD .00020 04000	GRADIENT INTERVAL	000 .00013 0034	238) 747/1		υu	GRADIENT INTERVAL	000 00461 00651	GRADIENT INTERVAL	DCD 00246 00449 .00273
ARC 14-120(CA238)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.35	DCL 03409 04918	3,35	DCL 03028 04180 0832	C 14-120(CA23B)		.9000 IN. XC .0000 IN. YC .7500 IN ZC	₹ 3.34	DCL 10849 11652	= 3.34	DCL 09683 10266 01018
AA	1 A	XMRP # 1339 YMRP # 190 ZMRP # 190	RN/L	# 45.000 ALPHAC 2.000 4.000 GRADIENT	RN/L	50.000 ALPHAC 2.000 4.000 GRADIENT	ARC	ΓĀ	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	RN/L	* 3.500 ALPHAC 2.000 9.000 GRADIENT	PN/L	7.500 ALPHAC P.000 4.000 GRADIENI
	REFERENCE DATA	SREF = 5500,0000 50.FT. LREF = 327,7800 1N. BREF = 2348,0400 1N. SCALE = .0125		Z G		Z G		REFERENCE DATA	SREF = 5509,0000 50,FT, LREF = 327,7600 14, BREF = 2348,0400 1N, SCALE = .0125		20		70

515	15 1		5.000 10.000 .600										
PAGE	4) (17 001	DATA	STAB ELEVON BOX										
	(PIXHXI4)	PARAMETRIC			DCBL 00081 00062		DCBL 00044 00068 00018		DCBL 00034 00021		DCBL .00015 .00030		DCBL 09624 .0009
			BETA BRUDDER BIORB B		DCYN .00310 .00279		DCYN .00240 .00213		DCYN .00068 .00072		DCYN . DGGEG . 00047 0000		00053 .00042 00006
	(CARRIER DATA)			-5.00/ 5.00	0CY 00572 00408	-5.00/ 5.00	DCY - 00372 00250	5.00/ 5.00	0CY 03172 00084 00083	5.00/ 5.00	2C* -,03253 -,03639 -,03656	-5.00/ 5.00	2CY 00128 00055 .00015
	0251			p	DCLM .09492 .09488	INTEPVAL .	DCLM .07447 .02540.	INTERVAL = -	DCLM .03742 .04107	INTERVAL = -	DCLM .07.557 .02650.	a	50808. 1050. 10880. 108836.
CA23B	3B) 747/1 AT!			GRADIENT INTERVAL	000 -,00184 -,00336	GRADIENT IN	000 00113 00219	GRADIENT IN	29800. - 0000. - 0000.	GRADIENT IN	000 .0002 .00046 .00385	GRADIENT INTERVAL	000 00000 00000 00000
SOURCE DATA - CAZ	14-120(CA23B)		39.9000 IN. XC .0000 IN. YC 90.7500 IN ZC	= 3.33	10.000 ALPHAC DCL 2.00008231 4.00009580 GRADIENT00931	3.35	DCL 07215 07859 00578	3.35	DCL 03798 05098 00903	3.35	DCL -,02790 -,03216 -,00474	* 3.35	5CL 01734 67350 60803
	ARC		1339	RN/L		RN/L	15.000 ALPHAC 2.000 4.000 GRADIENT	RN/L	30.000 ALPHAC 2.000 4.000 GRADIENT	RN/L	45.000 ALPHAC 2.000 4.000 GRADIENT	7/28	50.000 ALPHAC 2.000 4,000 GRADIENT
TABULATED		۲	XMRP YMRP ZMRP		H		•		#		и		•
MAR 76		REFERENCE DATA	5525.0000 50.FT. 327.7800 IN. 2348.0400 IN.		Z 0		20		20		20		20
DATE 23			SREF LREF BREF SCALE #				्राम्, ्रिजिश् एकः स्थानि		i edaj Vilaug				

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5. TJU 61 1		DATA	STAB = 5.000 ELEVON = 5.000 DX = 10.000 MACH = .50										
(RIXHVO))	PARAMETRIC [0000.		DCBL 00036 00088		DCBL 00040 00075		DCBL 00034 00059		DCBL 00103 00085		DCBL .00014 .00009
•			BETA # RUDDER # LORB #		DCYN .00294 .00215		DCYN .00260 .00207		DCYN .00543 .00504		DCYN .00203 .00185		DCYN .00058 .00030
O2SI (CARRIER DATA)				-5.00/ 5.00	DCY 00545 00201 .00151	-5.00/ 5.00	DCY 00441 00041 70007	-5.00/ 5.00	DCY 00399 00291	-5.00/ 5.00	DCY 00280 00229 .00004	5.00/ 5.00	DCY 00187 00030
AT1					DCLM .20400 .20794	at	0CLM .17481 .17656 .00899	INTERVAL = -	DCLM .15664 .15633 .00796	INTERVAL = -	DCLM .12550 .12307 .00690	TERVAL * -5	DCLM .07033 .05934 .00759
23B) 747/1			ပပ	GRADIENT INTERVAL	0CD 00730 01023	GRADIENT INTERVAL	DCD 00541 00789	GRADIENT IN	DCD 00407 00632	GRADIENT IN	86200'- 61700'- 99200'-	GRADIENT INTERVAL	DCD 00073 00153
ARC 14-120(CA23B)			559-9000 IN. XC .0000 IN. YC 90.7500 IN ZC	= 3.34	DCL 13389 15157 01140	± 3,34	DCL 11657 13054 00954	* 3.33	DCL 10480 11654 00843	± 3.35	DCL 08730 09666 00724	* 3,35	DCL 052?6 06486 00886
AA	ď	:	XMKP = 1339 YMRP = 2 ZMRP = 190	RN/L	3.500 ALPHAC 2.000 4.000 GRADIENI	RN/L	7.500 ALPHAC 2.000 4.000 GRADIENT	RN/L	* 10.000 ALPHAC 2.000 4.000 GRADIENT	RN/L	= 15.000 ALPHAC 2.000 4.000 GRADIENT	PN/L	30.000 ALPHAC 2.000 4.000 GRADIENT
	REFERENCE DATA	15 00 0000 0055	227.7800 IN. 2348.0400 IN. 2348.0400 IN.		Z Q .		Z Q		20		20		Z 0

DATE 23	7 AA 7 6 A 6 A 6 A 6 A 6 A 6 A 6 A 6 A 6	TABULATED SOUR	- DATA -	m d				·	PAGE	
		ARC	C 14-120(CA23B	1/47/1	AT1 0251 (C	(CARRIER DATA)		(PNHX I S)	5) (17 OCT 75)	
	REFERENCE DATA	⋖						PARAMETRIC	DATA	
SREF = BREF = SCALE =	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN. .0125	XMRP = 1339 YMRP = 190 ZMRP = 190	.9000 IN. XC .0000 IN. YC .7500 IN ZC				BETA RUDDER 1008		STAB = 5.000 ELEYON = 5.000 DX = 10.000 MACH = .600	
		RN/L	= 3.35	GRADIENT IN	INTERVAL =	-5.00/ 5.00				
	Z G	# 45.000 ALPHAC 2.000 4.000 GRADIENT	DCL 03273 04563 00901	0000 -,00008 -,00045	DCLM .04405 .008900.	DCY 0000130 00000.	.00028 .00011 .00001	- 00017 - 00027 - 00016		
		RN/L	3.35	GRADIENT INTE	ERVAL =	-5.00/ 5.00				
	20	50.000 ALPHAC 2.000 +.000 GRADIENT	DCL 02978 03811 06573	DCD .00004 00007	DCLM .03906 .03987 .03987	DCY 00110 .00009	DCYN .00009.	DCBL 00007 00009		
		ARC	C 14-120(CA23B)	747/1	AT1 0251 (C	(CARRIER DATA)		(PNHX16)	6) (17 OCT 75)	
	REFERENCE DATA	TA						PARAMETR1C	; DATA	
SREF = EREF = SCALE = SCALE = SCALE	5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN.	XMRP = 1339 YMRP = 190 ZMRP = 190	.9000 IN. XC .0000 IN. YC .7500 I'I ZC				BETA # RUDDER # 10RB # DY	.000 .000 6.000	STAB * 5.000 ELEVON * 5.000 DX * 20.000 MACH * .600	
		RN/L	= 3.34	GRADIENT IN	INTERVAL = -	5.00/ 5.00				
	20	3.500 ALPHAC 2.000 4.000 GRADIENT	DCt 08552 09736 00848	000 - 00491 - 00500 - 00319	DCLM .13195 .13519	DCY -,00519 -,00351	DCYN .00278 .00233	DCBL -,00051 -,00053		
		RN/L	= 3.34	GRADIENT IN	INTERVAL = -	-5.00/ 5.00				
	20	* 7.500 ALPHAC 2.000 4.000 GRADIENT	DCL 07171 08542 00941	DCD 00224 00383	DCLM .10653 .10970 .00970	DCY -, 00'440 -, 00'302 -, 00'440	DCYN .00243 .00214 0001	DCBL -,00041 -,00050 -,00010		

PAGE 518

	5.000 5.000 20.000										
DATA	STAB ELEVON # DX MACH #										
PARAMETRIC	.000 .000 .000 .000		DCBL 00048 00059		DCBL 00020 00084		DCBL 00015 .00008		DCBL 00005 00003		DCBL .00012 .00018
	BETA RUDDER I 10RB I DY		DCYN .00249 .00209 00021		DCYN .00202 .00161 00021		DCYN .00067 .00040		DCYN , 00036 , 00011 -, 00013		DCYN .00040 .00010
		-5.00/ 5.00	.00512 00512 00304 .00083	-5.00/ 5.00	DCY -,00438 -,00205 -,0095	5.00/ 5.00	DCY 0022B 00101	5.00/ 5.00	720 -,00177 -,00000,	5.00/ 5.00	.00211 .00017 .00088
		μ	DCLM .09418 .09778		DCLM .07331 .07710		DCLM .03929 .04416	Ħ	DCLM .02442 .02949	H	02170 .02170 .02650
	OO	GRADIENT IN	DCD 00143 00288	GRADIENT IN	DCD 00075 00177	GRADIENT IN	000 .00058 .00016	GRADIENT IN	000 00100 00100 00100 59860	GRADIENT IN	000 00067 00098 00399
	9000 IN 0000 IN NI 0007	= 3.33	DCL 07026 08071 00778	3 .35	DCL 05316 06762 00979	3.35	DCL 03280 04557 08994	3.35	DCL -,01689 -,02678 -,00750	= 3.35	DCL 01908 02358 00486
	1339 F 190	RN/L	10.000 ALPHAC 2.000 4.000 GRADIENT	RN/L	15,000 ALPHAC 2,000 4,000 GRADIENT	RN/L	30.000 ALPHAC 2.000 4.000 GRADIENT	PN/L	45.000 ALPHAC 2.000 4.000 SRADIENT	RN/L	50.000 ALPHAC 2.000 4.000 GRADIENT
4	X X X		μ		•		Ħ		11		*
PEFERENCE DA.	# 3500.0000 # 327.7800 # 2349.0400		Z Q		2 0		ZG		ZC		ZC
	DATA	## 5530.000 SQ.FT. XMRP = 1339.9000 IN. XC ## 6530.0000 STAB ## .0000 STAB ## .0000 IN. YC ## RUDDER ## .000 ELEVON ## ## 6.000 DX ## .0000 IN ZMRP ## 190.7500 IN ZC ## .000 MACH ## .000	### PEFERENCE DATA ### ### ### ########################	# 5530.000 SQ.FT. XMRP = 1339.9000 IN. XC	# 5500.000 SQ.FT, XMRP = 1339.9000 IN, XC	# 5500.000 SQ.FT, XMRP = 1339.9000 IN. XC	## S500.000 GO.FT. XMPP = 1339.9000 IN. XC	FEFFENCE DATA FOR PREFENCE DATA	FEFERENCE DATA SEGO. COLOR DATA PREFERENCE DATA PREFERENCE DATA PREFERENCE DATA PREFERENCE DATA PREFERENCE DATA PREFERENCE DATA PROBLEM P	FEFFENCE DATA FEFFENCE FEFFEN	PEFFENCE DATA *** SEGO-1000 GO, FT. XPHP *** 1339.9000 IN. YC *** SEGO-1000 GO, FT. XPHP *** 1309.9000 IN. YC *** SEGO-1000 GO, FT. XPHP *** 19000 IN. YC *** SEGO-1000 GO, FT. XPHP *** 1900 IN.

0.0 4.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7	}	2220	SREF * 5500.0000 LREF = 327.7800 BREF * 2348.0400 SCALE * .0125		0)	RIG	INAL PA	GE	is Tvi				
		BEFFERENCE DATA	SO.FT.		20		20		20		02		20
TABULATED] 	4	X X X X X X X X X X X X X X X X X X X		11				n		jŧ		
_			1339.9000 0000 190.7500	RN/L	3.500 ALPHAC 2.000 4.000 GRADIENT	RN/L	7.500 ALPHAC 2.000 4.000 GRADIENT	RN/L	10.000 ALPHAC 2.000 4.000 GRADIENT	PN/N	15.000 ALPHAC 2.000 4.000 GRAD:ENI	J/NB	30.000 ALPHAC 2.000 4.000 0RAD :ENT
SOURCE DATA - CA238	14-120(CA23B)		3000 IN. XC 3000 IN. YC 7500 IN ZC	3,34	DCL 12225 12333 00310	± 3.34	DCL 10310 11183 00692	3.33	DCL -, 09972 -, 10376 -, 00958	3.35	DCL 08110 09245 00823	3.35	DCL 05256 05960 00609
38	1747/1			GRADIENT INTERVAL	DCD 00850 01098	GRADIENT IN	000 -,00646 -,00886 -,00886	GRADIENT IN	DCD 00484 00737	GRADIENT IN	DCD 00361 00558	GRADIENT IN	DCD -,00172 -,00261
	AT1 0251 (CA			ERVAL = -5	.19598 .21128	INTERVAL = -5	DCLM .17056 .18003	INTERVAL = -	DCLM . 15481 . 15900 . 15900	INTERVAL = -	DCLM .12518 .12850	INTERVAL = -	DCLM .07162 .07305
	(CARRIER DATA)			00.5 700.5	DCY 00401 .00100 .00229	5.00/ 5.00	DCY 00308 00020	-5.00/ 5.00	007 00254 00116	5,007 5.00	507 00175 00185 00004	-5.00, 5.00	DCY - 00133 - 00143
			BETA RUDDER RIORB E		DCYN .00189 .00137 00027		DCYN .00168 .00132		DCYN .00154 .00129		DCYN .00121 .00113		DCYN .00013 .00029
	(PNHX17)	PARAME TRIC	. 000. . 000. . 000.		DCBL 00100 00036		DCBL 00057 00057		DCBL 00034 00079 00028		DCBL 00072 00048 .00006		DCBL .00022 00010
PAGE	(71)	DATA	STAB # ELEVON # DX # MACH #										
SE 519	CT 75		5.000 5.000 20.000										

ORIGINAL PAGE IS OF POOR QUALITY

SREF LREF BREF SCALE

(17 OCT 75 PAGE STAB ELEVON DX PARAMETRIC DATA (PNHX17) RETA RUDDER 10RB DY ARC 14-120(CA23B) 747/1 ATI 0251 (CARRIER DATA) # 1339.9000 IN. XC # 190.7500 IN ZC 7×89 REFERENCE DATA 5500,0000 SO.FT. 327,7800 IN. 2349.0400 IN.

DCBL .00005 -.00005 DCYN .00007 -.00018 DCYN -.00005 -.00010 -5.00/ 5.00 -5.00/ 5.00 007 -,00095 ,00014 ,00034 .00094 .00081 .00081 DCLM .04049 .04331 .00952 DCLM , 04431 , 04792 , 00932 GRADIENT INTERVAL * GRADIENT INTERVAL = DCD -.00074 -.00099 DCD -.00082 -.00109 DCL -.03315 -.04031 -.00614 DCL -,03056 -,03995 -,00725 RN/L = 3.35 3.35 RN/L = 45.000 ALPHAC 2.000 4.000 GRADIENT 50.000 ALPHAC 2.000 4.000 GRADIENT 20 20

(17 001 75) PARAMETRIC DATA (PNHX27) ARC 14-120(CA23B) 747/1 ATT 0351 (CARRIER DATA) REFERENCE DATA

STAB ELEVON DX .000 .000 .000 .000 BETA RUDDER 10RB DY 5.00 -5.00/ GRADIENT INTERVAL = 1339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC 2 3 3 3 3 3 3 4 4 4 6 4 5500,0000 50,FT. 327,7800 1N. 2348,0400 1N.

SREF LREF PREF

DCYN .00183 .00183 GRADIENT INTERVAL = -5.00/ 5.00 DCY -.03152 -.00395 -.00142 DCLM .14249 .14389 .00881 000 -.00378 -.00744 -.00192 DCL -.11637 -.13470 -.01173 3.30 RN/L = 3.500 AEPHAC 2.000 8.000 GRADIENT 20

DCBL -.00155 -.00018

DCBL -.00071 -.00014 DCYN .00178 .00173 207 -.00282 -.00318 DCLM .12178 .12162 .00804 0CD -.00311 -.00512 DCL -,10797 -,12585 -,01150 7.500 ALPHAC 2.000 9.000 GRADIENT

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TABULATED SOURCE DATA - CA23B
76
MAR
23
DATE

(PNHX27) 747/1 ATI 03SI (CARRIER DATA) ARC 14-120(CA23B)

8.000 0.000 0.000 0.000 0.000 STAB ELEVON MACH PARAMETRIC DATA DCBL .00011 -.00006 -.00015 DCYN .00188 .00172 BC TA RUDDER 10RB DY 5.00 DCY -.00411 -.00263 -5.00/ DCLM .10901 .10684 .00703 GRADIENT INTERVAL = DCD -.00277 -.00526 339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC DCL -.10403 -.12214 -.01162 3.30 # 7/Nd 19.000 ALPHAC 2.000 4.000 GRAD:ENT XMRP YMRP ZMPP REFERENCE DATA 5500.0000 SQ.FT. 327.7800 IN. 2348.0400 IN. 20 SREF LREF BREF SCALE

DCBL .00006 .00016 DCBL ..00042 ..00025 DCYN .00130 .00119 DCYN .00081 .00087 GRADIENT INTERVAL = -5.00/ 5.00 -5.00/ 5.00 -5.00/ 5.00 DCY -.00321 -.00149 DCY -.00171 -.00081 DCLM .04756 .04607 .00737 DCLM .08405 .08253 .00735 GRADIENT INTERVAL = GRADIENT INTERVAL . DCD -.00093 -.00168 000 -.00164 -.00371 DCL -.05995 -.07088 -.00803 DCL -.08562 -.16408 -.01129 3.30 3.29 30 PN/L 30.000 ALPHAC 2.000 4.000 GRADIENT 15.000 ALPHAC A.000 4.000 GRADIENT 20 20 20

DCBL -,00002 .00002 DCBL -.00020 -.00022 #20000. DCYN .00003 .00014 -5.00/ 5.00 700 .00000 -.00000 -.00004 .00023 .00031 DCLM .02722 .02551 .00776 DCLM .03007 .02994 .00805 GRADIENT INTERVAL = DCD -.00069 -.00071 DCD -.00057 -.00114 DCL -, 03534 -, 04593 -, 00786 DCL -, 03770 -, 03993 -, 00368 3.30 50.000 ALPHAC 2.000 4.000 45.620 ALEMAC P.000 P.000 08AD:ENT 20

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2

(17 OCT

(PNHX28) (17 OCT 75)

(CARRIER DATA)
747/1 AT1 0351
ARC 14-120(CA238) 747/1 ATI 0351 (CARRIER DATA)

5.000 .000 10.000										
STAB ELEVON # DX MACH #										
		DCBL 00051 00044		OCBL 00051 00060		DCBL -,00058 -,00044		DCBL 00066 00043		DCBL .00009 00027
BETA BUDDER ICRB CY		DCYN .00113 .00109		DCYN .00140 .00142		DCYN .00171 .00168		DCYN . 00184 . 00197 . 00066		00000 - 00000 - 150000
	-5.00/ 5.00	00176 00120 00007	-5.00/ 5.00	DCY 00211 00165	5.00/ 5.00	DCY 00316 00549	5.00/ 5.00	DCY 00233 00332 00071	5.00/ 5.00	DCY 00147 0058
		DCLM .08474 .08475 .00812	н	86800. 60990. 04490.	Ħ	DCLM .05486 .05910	μ	00187 .04157 .04543	1"	02070 .02070 .02466
ပ္ပပ္ .	GRADIENT 1	DCD 00265 00356	GRADIENT 1	DCD 00:20 0554	GRADIENT 1	DCD 00092 00199	GRADIENT 11	DCD 00032 00120	GRADIENT IN	000 -, 00029 -, 00006
ZZZ	3.31	DCL 09232 10134 00707	≠ 3.30	DCL 07548 08705 00834	≥ 3.30	00L 06667 08259 01052	3.30	.05479 05479 07175 01104	3.29	DCL 03735 04855 05786
1339	RN/L	3.500 ALPHAC 2.000 4.000 GRADIENT	RN/L	7.500 ALPHAC 2.000 4.000 GRADIENT	RNAL	10.000 ALPHAC 2.000 4.000 GRADIENT	RNZ	15.000 ALPHAC 2.000 4.000 GPADIENT	FNA	30.000 ALPHAC A.000 4.000 GRADIENT
X MARI								tı		•
5500.0000 SO.FT. 327.7800 IN. 2348.0400 IN.		Z Q		Z 0		Z 0		20		20
	5500.0000 SO.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB 327.7800 IN. YMRP = .000 IN. YC RUDDER = .000 ELEVON 2348.0400 IN. ZMRP = 190.7500 IN ZC ICRB = 6.000 DX .0125	5500.0000 SO.FT. XMRP * 1339.9000 IN. XC 327.7800 IN. YMRP *	5500.0000 SO.FT. XMRP = 1339.9000 IN. XC 327.8800 IN. YMRP =	5500.0000 SO.FT. XMRP = 1339.9000 IN. XC 327.7800 IN. YMRP = 100.7500 IN. YC 2348.0400 IN. YMRP = 100.7500 IN. YC 2348.0400 IN. ZMRP = 100.7500 IN	50.FT. XMRP = 1339.9000 IN. XC IN. ZMRP = 190.7500 IN. YC IN. ZMRP = 190.7500 IN. ZC IN. ZMRP = 190.75	5500.0000 50.FT. XMRP = 130.7500 IN. XC	5500.0000 50.FT	5500.0000 50.FT. XHRP • 1339.9000 IN. XC	### 5500.0000 50.FT. XMRP = 1339.9000 IN. XC	5500 0000 50. FT

E DATA - CA23B	ARC 14-120(CA23B) 747/1 ATI 03SI (CARRIER DATA)		39.9000 IN. XC .0000 IN. YC 90.7500 IN ZC	1/L = 3.30 GRADIENT INTERVAL = -5.00/ 5	C DCL DCD DCLM DCY 0.0265100018 .0126700055 0003655 .00030 .01720 .00038 1100758 .00399 .01038	RN/L = 3.30 GRADIENT INTERVAL = -5.007	AC DCL DCD DCLM DCY 30 01997 00007 00 02635 00033 01569 00018 01 00580 00391 01098 0.099	ARC 14-120(CA23B) 747/1 ATI 0351 (CARRIER DATA		339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC	PN/L = 3.3; GRADIENT INTERVAL = -5.00/	AC DCL DCD DCLM DCY 001211800609 .1470900268 001302200738 .15187 .00057 NT00598 .00310 .01050	RN/L = 3.30 GRADICNT INTERVAL = -5.00/	AC DCL DCD DCLM DCY 00 10*42 00%30 .12381 00271 00 11547 00589 .12797 00093 NI 00558 .00295
. DATE 23 MAR 76 TABULATED SOL		REFERENCE DATA	SREF = 5500.0000 50.FT. XMRP = 13. LREF = 327.7800 1N. YMRP = 19. BPEF = 2348.0400 1N. ZMRP = 19. SCALE * .0125	RN/L	ORIGIN ORADIENT		PAGE IS		REFERENCE DATA	SPEF = 5500.0000 SQ.FT. XMRP = 13 LREF = 327.7800 IN. YMRP = RREF = 2349.0400 IN. ZMRP = 1 SCALE = .0125	No.	DZ = 3.500 ALPHAC 2.000 4.000 GRADIENT	ž.	DZ 7.500 ALPHAC 2.000 P.000 P.000 GRADIENT

(CARRIER DATA)	
1320	
747/1 AT1	
14-120(CA238)	
ARC	

(5C 100 C()	,	DATA	STAB = 5,000 ELEVON = ,000 DX = 10,000	ı									
(BCXHNG)		PARAMETRIC	.000 .000 .000		DCBL 00009 00012		DCBL 00058 00038		DCBL 00051 00036		DCBL 00019 00022		0CBL .00020 .0004 0
			EETA RUDDER = 1CRB = 0Y		00 YN 000 144 000 177		DCYN ,00190 ,00187		DCYN . 00109 . 00101		DCYN .000.23 .000.12		80000 08000 7,000
(CARRIER DATA)				-5.00/ 5.00	DCY 00262 00194 .00013	-5.00/ 5.00	0CY 00353 00307	-5.00/ 5.00	700 - 00165 - 00107 - 00008	-5.00/ 5.00	500 00048 00078 00048	-5.00/ 5.00	00051 00051 00021
0351				н	DCLM .10927 .11230	,,	DCLM .08575 .08790 .00918	#	ВС. М. 20 86 н. 9. с. 178 в 15 178 в 15	INTERVAL = -	3CLM .02770 .03137 .0995	INTERVAL = -	DCLM . 02531 . 02875 . 00984
4238) 747/1 ATI		ţ	2C	GRADIENT INTERVAL	DCD 00311 00485 .00288	GRADIENT INTERVAL	000 00194 00368	GRADIENT INTERVAL	000 04100 86000	GRADIENT IN	DCD 00039 00064	GRADIENT IN	0CD 00060 00064
ARC 14-120(CA23B)		0000	NI 0000 IN	= 3.30	DCL 09292 10731 00975	≈ 3.30	DCL 07837 09398	3.29	DCL 04800 05330	3.30	5CL 03372 54260 03750	3.30	93124 94112 90759
	∢	XMRP = 1220	വ സ	RNYL	= 10.000 ALPHAC 2.000 4.000 GRADIENT	RN/L	* 15.000 ALPHAC 2.000 4.000 GRADIENT	RN/L	* 30.000 ALPHAC 2.090 4.000 GRADIENT	RN/L	+ 45.039 ALPHAC 2.033 4.030 GRADIENT	I/NG.	= 50.000 ALPHAC 2.000 4.000 GRADIENT
	REFERENCE DATA	5500.0000 SQ.FT.	327,7800 IN. 2348,0400 IN. 0125		2 0		Z O		20		Z O		ZG

525	75)		5.000 20.000 .600								
PAGE	17 001	DATA	STAB . ELEVON . DX .								
	(PNHX30)	PARAMETRIC			DCBL .00052 .00055 00004		DCBL .00018 .00020 00005		DCBL 00003 00009		DCBL 00024 00003
			BETA RUDDER I IORB		DCYN .00097 .00080 00009		DCYN .00120 .00109		00136 .00138 .00128 00004		DCYN . 00159 . 00156 09002
	03S1 (CARRIER DATA)			-5.00/ 5.00	DCY 00179 00023	-5.00/ 5.00	DCY 00210 00097	-5.00/ 5.00	DCY 00225 00145	-5.00/ 5.00	DCY 01282 02696
					DCLM . 14571 . 15667 . 01359	н	DCLM .12174 .13103	и	DCLM .10723 .11410	11	CCLM .08365 .08925
338	38) 747/1 ATI			GRADIENT INTERVAL	DCD 00600 00796	GRADIENT INTERVAL	DCD 00445 00635	GRADIENT INTERVAL	DCD 00322 00520 .00276	GRADIENT INTERVAL	DCD 00275 00402
SOURCE DATA - CA23B	ARC 14-120(CA238)		1339.9000 IN. XC .0000 IN. YC .190.7500 IN ZC	3.31 (DCL -,11010 -,11851 -,00676	3.30	DCL 09327 10597	3.30	DCL 07984 0970?	≡ 3.30	07221 08684 09987
TABULATED SOURCE	ARC		н и и	RN/L	3,500 ALPHAC R.000 GRADIENT	RN/L	7.500 ALPHAC P.000 Y.000 GRADIENT	д 7	10.000 ALPHAC 2.000 4.000 GRADIENT	T/Ng	08 P. COO. CO. CO. CO. CO. CO. CO. CO. CO. C
TABU		TA	XMRP YMRP ZMRP		*		h		И		II
DATE 23 MAR 76		REFERENCE DATA	SREF * 5500.0000 SQ.FT. LREF * 327.7800 IN. BREF * 2348.0400 IN. SCALE * .0125		20		20		20		20

DCBL -.00008 .00038

DCYN .00100. .00091

DCY -,00252 -,00111

DCLM .04533 .04954 .01022

DCD -.00160 -.00186

CCL -.04798 -.05688 -.00701

20

GRADIENT INTERVAL = -5.00/ 5.00

3.29

₽U/L ■

- CA23B
DATA(
SOURCE
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r A B UL
•

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	(PNHX30) (17 OCT 75)	PARAMETHIC DATA	. 000 STAB = 5.000 . 300 ELEVON = . 000 8.300 OX = 20.000 . 000 MACH = .600		DCBL 00022 .00009		DCBL .00036 .00003	(17 OCT 75)	PARAMETRIC DATA			DCBL .00028 .00044 00042	
		_	BETA # RUDDER # IORB # DY		00026 .00026 .00026		DCYN .00015 .00007		O.	BETA RUDDER # 1CRB # DY		DCYN 00097 00115	
	(1777 ALL USSI (CARRIER DATA)			-5.00/ 5.00	DCY 00099 00038	-5.00/ 5.00	DCY 00101 .00056 .00056	03SI (CARRIER DATA)			-5.00/ 5.00	DCY 00226 00022	-5.00/ 5.00
	7) 1660 114			si	DCLM .02669 .03749	ŋ	DCLM .02318 .02885					CCLM .08139 .08161	
			0.0	GRADIENT INTERVAL	000 00042 00119	GRADIENT INTERVAL	DCD 00071 00077	3B) 747/1 ATI			GRADIENT INTERVAL	DCD 00410 00448	GRADIENT INTERVAL
ABC 14-12000			7500 IN. YC	3.30	DCL 02550 04712	₹ 3.30	DCL n2906 03650	ARC 14-120(CA23B)		3.9000 IN. XC .0000 IN. YC I.7500 IN ZC	3.31	55. -,09896 -,09629	3.30
ď			XMRP = 1339 YMRP = 190	RN/L	# 45.000 ALPHAC 2.000 4.000 GRAD:ENT	RN/L	* 50.000 ALPHAC 2.000 4.000 GRADIENT	AR(XMRP = 1339. YMRP = 190.	RN/L	3.500 ALPHAC 2.000 4.000 GRADIENT	RN/L
			SREF = 5500.0000 SO.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125	·	Z0		20		REFERENCE DATA	SREF = 5500.0000 SQ.FT. x LREF = 327.7800 IN. Y BREF = 2348.0400 IN. Z SCALE = .0125		ZG	

DCYN . 30125 . 00138 . 00006

DCY -.00255 -.00220

DCLM .06470 .06804 .00979

DCD -.00262 -.00315

DCL -.07290 -.08345 -.00433

7.500 ALPHAC P.000 9.000 GRADIENT

20

TABULATED SOURCE DATA - CA238
DATE 23 MAR 76

SREF "LREF" BREF "SCALE"

9/	TABUL	TABULATED SOURCE	DATA -	CA238					PAGE	SE 527	
		ARC	14-120(CA23B)	747/1	ATI 0351 (CARRIER	ARRIER DATA!		(PNHX31)	11) (17 OCT	CT 75 1	
REFERENCE DATA	4							PARAMETRIC	DATA		
0,0000 SQ.FT. 7,7800 IN. 8,0400 IN.	XMRP YMRP ZMRP	* * *	19.9000 IN. XC .0000 IN. YC 30.7500 IN ZC				BETA BUDDER BIORB BUT	.000 .000 6.000	STAB ELEVON BOX MACH	5.000 20.000 600	
		RN/L	3.30	GRADIENT INT	INTERVAL = -	-5.00/ 5.00					
2 0	ıı	10.000 ALPHAC 2.000 4.000 GRADIENT	DCL 06421 07412 00752	DCD 00146 00220	DCLM .05440 .05949	DCY -,06269 -,00213	. 00142 .00142 .00154	DCBL 00021 00009			
		RN/L	3.30	GRADIENT INT	INTERVAL =	5.00/ 5.00					
Z 0	•	15.000 ALPHAC 2.000 4.000 GRADIENT	DCL 05793 06497 00608	000 - ,00088 - ,00128	DCLM .04045 .04546	DCY 00298 00229	DCYN .00169 .00171	DCBL .00053 00031			
		RN/L	3.29	GRADIENT INT	INTERVAL = -	5.00/ 5.00					
20	•	39.000 ALFHAC 2.000 4.000 GRADIENT	DCL 03574 04542 00740	DCD .00011 00031	DCLM .01802 .02292	DCY 00060 00165 00074	DCYN .00046 .00083	DCBL 00014 .00003			
		RN/L.	3.30	GRADIENT IN	INTERVAL = -	-5.00/ 5.00					
ZC	n	45.000 ALPHAC 2.000 4.000 GRADIENT	DCL. -,02061 -,03124	0000° 0000° 04000°	01035 .01035 .01507	00.01 00.01 00129	00032 .00002 .00002	DCBL 00033 .00002			
		RN/L	3.30	GRADIENT IN	INTERVAL .	-5.00/ 5.00					
20	u	50.000 ALPHAC 2.000 4.000 GRADIENT	DCL 02150 02826 00594	000 . 00019 57800.	DCLM .00871 .01358	DCY 00025 .00043	00000 000000 0000000000000000000000000	DCBL .00003 .00017			

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1 75)		5.000 .000 .000 .000										
ARC 14-1201CA23B) 747/1 AT1 0351 (CARRIER DATA) (PNHX34) (17 0CT 75	PARAMETRIC DATA	STAB ELEVON BOX		ι								
		000. 000. 000. 000.		DCBL 00025 00042		DCBL 00023 00019		DCBL 00027 00005		DCBL 00067 00028		DCBL -,00026 -,00055 -,00021
		BETA RUDDER RUDD		-, 00013	DCYN 00013 00011	DCYN .00023 .00044	RN/L * 3.30 GRADIENT INTERVAL = -5.00/ 5.00	DCYN .00038 .00064		DCYN .03085 .03108		DCYN .00013 .00056
		339,9900 IN, XC .0009 IH, YC ICS.0008 IM ZC	-5.00/ 5.00	90000	RN/L = 3.30 GRAD!ENT INTERVAL = -5.00/ 5.00	DCY .00027 -,00006 -,00038		707 00040 00042	RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00	007 -,00048 -,00031	RN/L = 3.29 GFADIENT INTERVAL = -5.00/ 5.00	DCY .00069 .00002-
			RN/L = 3.31 GRADIENT INTERVAL = -	DCLM .08231 .07896		DCLM .06569 .06340		05881 .05881 .05595 .00697		DCLM .04592 .04502 .00766		DCLM .02593 .02534
				000 00125 00325 00275		DCD 00061 00240		DCD 60052 90187		DCD 00000 00109		DCD .00033 00019
				DCL 10252 11998		OCL 08927 10523 01054		0.08506 08506 09940		DCL 06957 08346		DCL -,04633 -,05556 -,00717
		# # #		3.500 ALPHAC 2.000 4.000 GRADIENT		7.500 ALPHAC 2.000 4.000 GRADIENT		10.650 ALFFAC 2.000 4.000 GRADIENT		15.000 ALPHAC A.000 4.000 GRADIENT		30.000 ALPHAC A.000 4.000 GRADIENT
		XXXXX XXXX QCXXX		н		#		(I		ħ		Ħ
	REFERENCE DATA	5500,0000 SQ.FT. 387,7800 TM. 864,810,000 TM.		2 0		20		02		02		20

529	5.000 .000 .000				. 75		5.000 5.000 600 600					
a	DATA STAB E ELEVON E DX MACH E				(0) (17 OCT	DAT4	STAB ELEVON BOX					
(hEXHNd)	PARAMETRIC .000 .000 6.000	DCBL . 00003	0000B	DCBL . 00008 . 00039	(PNHY10)	PARAMETR 1C	.000 .000 8.000		DCBL -,00134 -,00065		0CBL 00054 00016 .00013	
	BETA = RUDDER = 10R9 = 1.	0000 - 1	50000.	-,00003 -,00003 -,00003			BETA #RUDDER #10RB #10V		00081 - 00081 - 00082		200030 - 000030 - 00007	
(CARRIER DATA)		-5.00/ 5.00 DCY .00021 .00060	00001	, 00003 , 00003 , 00007	(CARRIER DATA)			5.00/ 5.00	00083 .00117 .000117	5.00/ 5.00	DCY .00056 .00101	
ATI 03S! (CA		M . ⊪ 74.0	0 .00832 INTERVAL = -5	DCLM .01522 .01526 .00813	AT1 0251 (CA			INTERVAL * -5	DCLM .20664 .20186	INTERVAL = -	DCLM .17710 .17047 .00480	
3 747/1		GRADIENT INTERVAL DCD DCL .00017 .01	.00360 GRADIENT INT	000 00007 00031	747/1			GRADIENT IN	00732 - 00732 - 01183	GRADIENT IN	DCD 00597 00996	
: DATA - CA23B 14-!20(CA23B)	.9000 IN. XC .0000 IN. YC .7500 IN ZC	3.30 C CCL 02309		DCL 02962 63773 03512	14-120(CA238)		339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC	3.34	000 - 15732 - 17483 - 01101	3.34	500 - 13837 - 15415 - 01645	
TABULATED SOURCE ARC	XMRP = 1339. YMRP = 190.	RN/L 45.000 ALPHAC 2.000 4.000	GRADIENT RN/L	50.00 ALF 2.	ARC		XMRP = 1339. XMRP = 190.	RN/L	3.500 ALPHAC 2.000 4.000 GRADIENT	P11/L	7.500 ALPHAC A.000 4.000 GRADIENI	
TAB	E DATA FT. XM ZM	± 20		. 20		E DATA	÷.		° 20		. 20	
76	REFERENCE DATA 5500.0000 SO.FT. 327.7800 IN. 2348.0400 IN.					REFERENCE DATA	5500.0000 50. 327.7800 IN. 2348.0400 IN.					
DATE 23 MAR	88 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	ORIGIN	AD OB (PAGE IS QUALITY			SREF = LPEF = PREF = SCALE =					

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(PNHY10)

	5.000 5.000 .000										
C DATA	STAB = ELEVON: DX MACH =	•									
PARAMETR1C			DCBL .00008 .00026		DCBL 00011 00027 00014		DCBL 00034 00023		DCBL 00022 00040		DCBL 00018 00012
	BETA ** RUDDER ** 10RB ** DY		DCYN 00026 .00000		00004 . 00004 . 00010		DCYN 00000 00001		DCYN .00007 .00000.		
		-5.00/ 5.00	.00061 .00109 .00003	-5.00/ 5.00	- 00108 - 00044 - 00011	-5.00/ 5.00	DCY 00062 00047 00014	-5.00/ 5.00		-5.00/ 5.00	007 000145 00039
			DCLM .15870 .15086		DCLM .12941 .12038		DCLM .07404 .06893		00cc3 .04885 .04636	INTERVAL = -	DCLM .04356 .04072
		GRADIENT INTERVAL	000 -,00505 -,00788	GRADIENT INTERVAL	DCD -,00376 -,00503	GRADIENT INTERVAL	DCD 00165 00302	GRADIENT INTERVAL	000 00085 00133	GRADIENT IN	000 00067 00113
	339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC	≠ 3.33	DCL 12528 14045 01014	3.35	DCL 10709 12226 01014	3.35	DCL 06579 08101 01017	3.35	DCL 04281 05654 00943	* 3.35	DCL 03932 04827 00704
	n a n	RN/L	10.000 ALPHAC 2.000 4.000 GRADIENT	RN/L	15.000 ALPHAC A.000 4.000 GRADIENT	RN/L	30.000 ALPHAC 2.000 4.000 GRADIENT	RN/L	45,000 ALPHAC ALPHAC 4,000 4,000 GRADIENT	RN/L	50.000 ALPHAC 2.000 9.000 GRADIENT
۲	XMRP YMRP ZMRP		**				n				
REFERENCE DATA	SREF = 5500.0000 SO.FT. LREF = 327.7800 iN. BREF = 2348.0400 iN. SCALE = .0125		20		2 0		20		20		ZC

i i	7.04 # 4.750	ATEN SOURCE DATA	. DATA - CA238	820					PAGE	E 531
D X	-		0	38) 747/1 AT1	0251	(CARRIER DATA)		(PNHY13)	3) (17 001	1 75)
	÷	•					_	PARAME TRIC	DATA	
MEFERENCE OF 5500.0000 SO.FT. 327.7800 IN. 2348.0400 IN.	XMRP YMRP ZMRP	= 1339 = 190	.9000 IN. XC .0030 IN. YC .7500 IN ZC				BETA RRUDDER BIORB BY	. 000 . 000 . 000 . 000	STAB = ELEVON = DX #ACH =	5.000 5.000 .000 .600
		RN/L	3.34	GRADIENT INTERVAL		-5.00/ 5.00				
Z 0	•	3.500 ALPHAC 2.000 4.000 GRADIENT	DCL 11806 13645 01176	DCD -,00355 -,00635	DCLM .13101 .12848 .00685	DCY 00246 00250 00623	DCYN .00149 .00148 00001	DCBL 00036 00011		
			3.34	GRADIENT INT	INTERVAL	-5.00/ 5.00				
20	#	7.500 ALPHAC 2.000 4.000 GRADIENT	DCL 10549 12003 00983	DCD 00248 00457	DCLM .11028 .10737 .00665	DCY 00367 00319	. 00002	DCBL 00002 .00005		
		RN/L	3.33	GRADIENT IN'	INTERVAL = -	5.00/ 5.00				
07	•	10.000 ALPHAC 2.000 4.000 GRADIENT	DCL 09490 11069	DCD 00192 00396	DCLM .09916 .09616		. 00169 . 00163 - 00003	DCBL 00016 00023		
		FN/1	3.35	GRADIENT IN	INTERVAL = .	-5.00/ 5.00				
Z 0	at .	15.000 ALFHAC 2.000 4.000 GRADIENT	DCL 08521 09753 00872	DCD 0011; 00284	DCLM .07955 .07794	DCY 00351 00289	DCYN .00158 .00159	DCBL 00024 00026		
		PN/L	3.35	GRADIENT IN	INTERVAL =	-5.00/ 5.00				
ZG	•	30.000 ALPHAC 2.000 4.000 GRADIENT	DCL -,053:8 -,07021 -,01107	000 00015 00119	DCLM .04676 .04687	00189 00069 00069	DCYN ,00085 ,00061	DCBL 00042 00019		

ARC 14-120(CA23B) 747/1 ATI 0251 (CARRIER DATA)

(PNHY13)

1	ය. 0000. 0000. 0000.					15 1		5.000 5.000 .000 .600				
DATA	STAB CLEVON # DX MACH #					8) (17 001	DATA	STAB = ELEVON = DX = MACH =				
PARAMETR:C			DCBL 00061 00021		DCBL 00001 .00005	(PNHY 18	PARAME TR 1 C	.000 .000 6.000		DCBL .00523 .00635		DCBL .00472 .00533
	BETA = RUDDER = 10R9 = 1		DCYN .00063 .00042		007N .00061 .00035			BETA RUDOER 10RB DY =		DCYN 00491 00457 .00016		DCYN 00409 00271
		5.00/ 5.00	DCY 00149 00058	5.00/ 5.00	DCY 00161 00025	(CARRIER DATA)			-5.00/ 5.00	DCY -,00582 -,00907 -,00184	5.00/ 5.00	DCY 05594 00863 00201
		INTERVAL = -	DCLM .03240 .03274 .00828	H	осгм . 0279 3 . 0286 3 . 00846	AT1 0251 (C,			INTERVAL = -	DCLM .11175 .11123	INTERVAL = -5	DCLM .09659 .09437
		GRADIENT INT	000 0000+6 04000	GRADIENT INTERVAL	000 .00010 00033	1/247			GRADIENT INT	DCD 00497 00657	GRADIENT INT	000 - 00340 - 00509 - 00509
	.9000 IN. XC .0000 IN. YC .7500 IN ZC	3.35	DCL 03387 04876 01000	3,35	DCL 03038 04162 00818	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.34	DCL 10637 12478 01176	* 3.34	DCL 08798 10392 01053
	# 1339 # 190	RN/L	45.000 ALPHAC 2.000 4.000 GRADIENI	RN/L	50.000 ALPHAC 2.000 4.000 GRADIENT	ARC		1339.	PN/L	3.500 ALPHAC 2.000 4.500 GRADIENT	RN/L	7.500 ALPHAC 2.000 4.000 CPADIENT
DATA	XMRP YMRP ZMRP		*		•		ATA	4447 4447 7447 7447 7447 7447 7447 744		*		•
REFERENCE DATA	SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BPEF = 2348.0400 IN. SCALE = .0125		20		20		REFERENCE DATA	SREF = 5500.0000 52.FT. LREF = 327.7800 1%. RREF = 2348.0400 1N. SCALE = .0125		ZC		

3E 533	ST 75 1		5.000 5.000 .000 .600										
PAGE	8) (17 00	: DATA	STAB ELEVON BOX HACH	ť									
	(PNHY18	PARAME TRIC			DCBL .00435 .00436 00005		DCBL .00318 .00365		DCBL .00103 .00095 00010		00002 . 00002 . 00026 . 00006		DCBL .00055 .00014
			BETA RUDDER 10RB		DCYN 00333 00169		DCYN -,00162 .00040		DCYN .00321 .00469		DCYN .00321 .00383		00744 .00563 .00314
	(CARRIER DATA)			-5.00/ 5.00	007 00465 00916 00246	-5.00/ 5.00	DCY 00680 01077 00219	-5.00/ 5.00	DCY 01014 01370 00199	-5.00/ 5.00	DCY 00856 00981	-5.00/ 5.00	DCY 00695 00794
	0251				DCLM .08681 .08506		DCLM .07188 .06979	INTERVAL = -	DCLM .04147 .04189	INTERVAL .	DCLM .02860 .02971	INTERVAL =	DCLM .02717 .02885 .03896
38	38) 747/1 ATI			GRADIENT INTERVAL	DCD 00276 00401	GRADIENT INTERVAL	0CD -,00179 -,00398	GRADIENT IN	000 00069 00081	GRADIENT IN	DCD 90006 00021	GPAD IENT II	070 45000 71000.
SOURCE DATA - CA238	14-120(CA238)		339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC	≈ 3.33	DCL 08047 09654 01064	3 .35	DCL 05738 08159 0965	* 3.35	FCL 04714 05723 00761	3.35	DCL 03089 03782	3.35	DCt. -, 02556 -, 03355 -, 00500
				RN/L	10.000 ALPHAC 2.000 4.000 GRADIENT	RN/.	15.000 ALPHAC 2.000 4.000 GRADIENT	RN/L	30.000 ALPHAC 2.000 4.000 GRADIENT	RN/L	45.000 ALFHAC 2.000 4.000 GRADIENT	PN/L	50.000 ALPHAC 2.000 4.000 GRAD!ENT
TABULATED		₹	XMRP YMRP ZMRP				k		•		•		•
DATE 23 MAR 76	,	REFERENCE DATA	SREF = 5500.0000 SQ.FT. LPEF = 327.7800 IN. BPEF = 2348.0400 IN. SCALE = .0125		20	T A T	2 2 PAGE		20		20		20

ORIGINAL PAGE IS

	84 H M N
C DATA	STAB ELEVON DX MACH
PARAMETRIC	000.000.000.000.0000.0000.0000.0000
_	2 H 11 H
	BETA RUCCER TORB DY
	* 1339.9000 IN. XC * .0000 IN. YC * 190.7500 IN ZC
T.	XMRP YNRP ZNRP
REFERENCE DATA	5500.0000 SQ.FT. 327.7600 N. 2348.0460 N.
	SREF LREF BREF SCALE

ARC 14-120(CA238) 747/1 ATI 0251 (CARRIER SATA)

i,

(PNHV19)

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	мм 0000 0000 0000										
DATA	STAB # ELEVON # DX # MACH #										
PARAMETRIC	.000 .000 .000 .000 .000		DCBL .00575 .00728		DCBL .00541 .00637		DCBL .00509 .00576		DCBL .00487 .00484 00007		DCBL .00159 .00132
	BETA K RUCCER I LORB I DY I		DCYN 00504 00289		DCYN 00328 00097		DCYN 00222 .00040		DCYN 00045 .00205		NY 20 . 00452 . 00097
		-5.00/ 5.00	DCY 00763 01200 00240	-5.00/ 5.00	DCY -, 00852 -, 01305 -, 00248	-5.00/ 5.00	DCY -,00887 -,01393 -,00274	-5.03/ 5.00	007 -,00986 -,01453	-5.00/ 5.00	0CY 01435 01832 00219
			DCLM .15791 .15676 .00754	•	DCLM .14283 .13995 .00668	ur	DCLM .13367 .15928 .00592	ħ	DCLM 11427 10955 00575	и	71900 - 06545 - 006545
	υu	GRADIENT INTERVAL	000 -,00753 -,00969	GRADIENT INTERVAL	000 00618 00836	GRADIENT INTERVAL	000 00515 00751	GRADIENT INTERVAL	000 -, 00434 -, 00603 -, 00609	GRADIENT INTERVAL	DCD 00177 00204
	339.9000 IN. XC .0000 IN. YC 190.7500 IN ZC	3.34	DCL 14691 16013	3,34	DCL 12342 13993 01082	* 3.33	DCL 10544 12361 01164	3.35	DCL 09888 11583	3.35	DCL 06277 07369 00802
	81 H 81	BN/L	3.500 ALPHAC 2.000 4.000 GRADIENT	RN/L	7.500 ALPHAC 2.030 4.000 GRADIENI	PN/L	10.000 ALPHAC 2.000 4.000 GRADIENT	FN/L	15.000 ALPHAC 2.000 4.000 GRADIENT	EM/L	30 , 000 ALPHAC 2 , 000 4 , 600 GRAD ! ENT
⋖	XMRP XMRP ZMRP				h				н		•
REFERENCE DATA	5500.0000 50.FT. 327.7600 14. 2348.0460 1N.		Z 0	Ž.	20		20		20		20

535	. 75)		5.000 5.000 .600					1 75)		5.000 .000 .000 .600				
PAGE	3) (17 OCT	DATA	STAB ELEVON BOX MACH					100 (1) (7	DATA	STAB ELEVON BOX MACH E				
	(PNHY 19	PARAMETRIC			DCBL 00006 .00053		DCBL .00045 .00007	(PNHY27)	PARAME TRIC	000.8		DCBL 00167 00019		DCBL 00076 00015 00025
		_	BETA BRUDDER BIORB BY		DCYN .000433 .000474 .000623		DCYN .00385 .00401 .00017			BETA RUDDER PORB BOY		DCYN .00191 .00186 00003		DCYN - 00181 - 00004
	OZSI (CARRIER DATA)			-5.00/ 5.00	DCY 01038 01092	5.00/ 5.00	DCY 00955 00949 00018	(CARRIER DATA)			-5.00/ 5.00	007 00137 00402 00153	5.00/ 5.00	DCY 00375 00316
	AT1 0251 (CA)			INTERVAL5	DCLM .04457 .04337	INTERVAL = -5.	DCLM . 04100 . 03384 . 00754	AT1 0351 (C/			INTERVAL = -	DCLM .14286 .14387	INTERVAL = -	0CLM 12195 12164 12164 16195
38	11211			GRADIENT INT	DCD 00035 00106	GRADIENT IN	000 00029 00059	747/1			GRADIENT IN	0CD 00370 00745	GRADIENT IN	DCD 00308 06612
CURCE DATA - CA238	14-120(CA23B)		.9000 IN. XC .0000 IN. YC .7500 IN ZC	* 3.35 (DCL 03664 05227 01037	. 3.35	00L 03192 04713	: 14-120:CA238)		1,9000 IN. XC .0000 IN. YC 1,7500 IN ZC	3.31	000 11619 13472 01183	3.30	00L -,10796 -,12597 -,0:155
Ŋ			# 1339 # 190	RN/L	45.000 ALPHAC 2.000 4.000 GRADIENT	RN/L	50.000 ALPHAC 2.000 4.000 CRADIENT	ARC		1339	PN/L	3.500 ALPHAC 2.000 Y.000 GRADIENT	PN/L	7.560 ALPHAC 8.000 CPAC:6:17
TABULATED	 	⋖	XMRP YMRP ZMRP		u		•		ΤΑ	XMAP YMAP ZMAP		ĸ		•
AL BAN 76 31 AN		REFERENCE DATA	SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2342.0400 IN. SCALE = .0125		20		Z Q		REFERENCE DATA	SREF = 5500.0009 50.FT. LREF = 327.7800 14. PREF = 2348.0400 14. SCALE = .0125		02		20

ARC 14-120(CA23B) 747/1 ATI 03SI (CARRIER DATA)

	000. 000. 000.										
DAT	STA ELE DX MACI										
PAGAME TRIC	000. 8000.		DCBL .00009 00009		DCBL 00043 00026		OCBL .00006 00015		DCBL 00002 .00003 60004		DCBL -,00020 -,00024 -,00068
	BETA * RUDDER * LORB *		DCYN .00189 .00172		DCYN .00129 .00117		007N .0007B .00085 .00003		DCYN - 00002 - 00003		- 00005 - 00005 - 00011 - 00007
		-5.00/ 5.00	DCY - 00409 - 00256	-5.00/ 5.00	DCY 00318 00139	-5.00/ 5.00	DCY 00165 00077	-5.00/ 5.00	DCY .00008 .0007 .0007	5.00% 5.00	DCY .00027 .00338
		NTERVAL .	DCLM .10908 .10689	ITERVAL .	DCLM .08407 .08248 .00732	u	OCLM .04763 .04605	"	DCLM .03011 .02991 .00801	p	DCLM .02726 .02646
	υo	GRADIENT IN	000 00276 00526	GRADIENT IN	000 00163 00371	GRADIENT IN	000 7.00033 00169	GRADIENT IN	DCD 00058 00116	GRADIENT IN	000 00069 000373
	9000 IN 0000 IN 7500 IN	₹ 3.30	DCL 10499 12227 01165	3,30	DCL 0856;1 10423 01133	₹ 3.29	DCL -,07013 -,07099	* 3.30	1007.00.1 20840.1 48080.1	3.30	. 05780 05780 05385 05358
	<u>к</u>	RN/L	10.000 ALPHAC A.000 4.000 GRADIENT	RN/L	15.300 ALPHAC 2.330 9.000 GRADIENT	RN/L	30,000 ALPHAC 2,000 4,000 GRADIENT	R:17L	45.000 ALFHAC R.C00 4.000 GPAD:ENT	1/1/15	50,000 At 6120 8,000 6,000 0820 0820 0820 0820
DATA	Σ.Χ.Χ. Σ.Χ.Χ.		"						μ		•
BONEGREDENCE	SPEF = 5500.000 50,FT LPEF = 327,7800 IN. BPEF = 2348.0400 IN. SCALE = .0125		Z G		20		Z Q		2 0		20
	DAT	#EFEPENCE DATA # 5520.000 SO.FT. XMMP # 1339.9000 IN, XC # 327.7600 IN. YMMP # 100.7500 IN ZC # 2340.0400 IN. ZMMP # 190.7500 IN ZC E # 3.01.088 # 8.000 DX # 2.01.085 # 2.01.085	PARAMETRIC DATA = 5500.000 SQ.FT. XMPP = 1339 9000 IN. XC = 327.7860 IN. YMPP = 10000 IN. YC = 2348.0400 IN. YMPP = 190.7500 IN ZC = 2348.0400 IN. ZMRP = 190.7500 IN ZC E = 2348.0400 IN. ZMRP = 190.7500 IN ZC RIVL = 3.30 GRADIENT INTERVAL = -5.007 5.00	## 5550000 SO.FT. XMPP = 1339 9000 IN. XC	# 5500.0000 SO.FT. XMMP = 1339.9000 IN. XC	# 5520.0000 SO.FT. XPPP = 1339.9000 IN. YC # 227.7800 IN. XPPP = 1390.7500 IN. YC # 227.800 IN. YC	# 550.0000 SO.FT.	## 552 3020 50.FT. XY-9P = 1339-9000 IN, XC	## 257.0 200 50.F1.	PETERENCE DATA *** SECTION CONTRICTORY *** S	PETERIC DATA *** 557-300 50,FT XYOP *** 1339 9000 IN, XC XYOP *** 1900 IN, XC XYOP XYOP *** 1900 IN, XC XYOP XYOP

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DATE 23 MAR 75	TABUL,	TABULATED SOURCE DATA - CA23B	DATA - CA						PAGE	537
		ARC	ARC 14-1201CA23B)		747/1 ATI 0351 (CARRIER	ARRIER DATA)		(PNHY32)	(17 OCT	1 27
REFERENCE DATA	.≪							PARAMETRIC	DATA	
SPEF * 5500.0000 SO.FT. LREF * 327.7805 IN. BREF * 2348.0400 IN. SCALE * .0125	XMRP YMRP ZMRP	# 1339.9000 # .0000	3000 IN. XC 3000 IN. YC 7500 IN ZC	444			BETA BUDDER BUDDER BUDY BUDY		STAB ELEVON DX	5.000 .000 .000 .000
		RN/L	3.31	GRADIENT INTERVAL	ıı	-5.00/ 5.00				
20	•	3.500 ALPHAC 2.000 4.000 GRADIENT	0CL 09755 11172 00965	0CD 00255 00330	DCLM .06986 .06875	00825 01105 00151	DCYN 00237 00211	DCBL .00407 .00529 .00055		
		RNZ	≥ 3.30	GRADIENT INTERVAL	н	-5.00/ 5.00				
Z 0	•	7.500 ALPHAC 2.000 4.000 GRADIENT	DCL 07862 09607 01128	0CD 00139 00274	DCLM .05745 .05597 .00737	DCY 00767 01127 00201	00126 -00000-	00828 .00438 .00438		
		HAVE.	* 3.30	GRADIENT INTERVAL	μ	-5.00/ 5.00				
ZG	•	10.000 ALPHAC 2.000 4.000 GRADIENT	0CL 07525 09259 01123	DCD 00121 00221	DCLM .04984 .05038	DCY 00775 01176 00222	DCYN 00047 .00090.	DCBL .00325 .00382 .00382		
		7/10	= 3.30	GRADIENT INTERVAL	ıı	-5.03/ 5.00				
Z Q	н	15.000 ALFHAC ALFHAC 4.000 GRADIENT	06232 07762 01020	DCD 00070 00139	DCLM .03773 .03884 .00867	DCY 00856 01236 00206	DCYN . 00100 . 00246 . 00074	DCBL .00231 .00227 00008		

DCBL . 00082 . 00085 - . 00005

DCYN .00274 .00404

DCY -.00748 -.01080 -.00187

DCLM .02269 .02284 .00819

DCD -,00001 -,00032 .00359

DCL -.03850 -.05144 -.05903

30.000 AL PHAC 2.000 4.000 GRADIENT

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GRADIENT INTERVAL * -5.00/ 5.00

3.29

PN/L

ARC 14-120(CA238) 747/1 ATT 0351 (CARRIFR DATA)

1 24 100		000°.					001 75 1	?	5.000 .000 .000 .600				
32)	C DATA		r				33) (17	DATA					
(PNHY32	PARAMETRIC	000. 000. 000.0 000.01		DCBL .00057 .00064		DCBL .00008 .00058	(PNHY33)	PARAME TRIC	. 000 . 000 . 000 . 000		DCBL .00458 .00600.		008L .00450 .00515
		BETA RUDDER BIORB BOY		DCYN .00226 .06282 .00028		DCYN .00194 .00243 .00024			BETA FUDDER FORB FORB FORB FORB FORB FORB FORB FOR		DCYN 00286 00086		DCYN -0000- -00100.
03SI (CARRIER DATA)			-5.00/ 5.00	DCY 00569 00577 00076	-5.00/ 5.00	DCY 00419 00554	0351 (CARRIER DATA)			-5.00/ 5.00	DCY 00891 01406 00279	-5.00/ 5.00	DCY 01013 01509
AT1 0351 (TERVAL .	DCLM .01499 .01714		DCLM .01269 .01498	ATI 0351 (C			INTERVAL =	DCLM .11367 .11058	INTERVAL	DCLM .10029 .09819 .00706
238) 747/1		OO	GRADIENT INTERVAL	.00011 .00012 .00386	GRADIENT INTERVAL	DCD .00027 .00006 .00364	1747/1			GRADIENT IN	DCD 00602 00780	GRADIENT IN	000 -,00465 -,00683
ARC 14-120 (CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.30	DCL 02575 03741	= 3.30	DCL 01987 03513 01019	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.31	DCL -,11906 -,14318 -,01462	3 .30	DCL -,11096 -,12932 -,01174
AR	ar.	XMRP # 1339 YMRP # 190	RN/L	* 45.000 ALPHAC 2.000 4.000 GRADIENT	RN/L	± 50.000 ALPHAC 2.000 4.000 GRADIENT	ARC		XXXXX = 1339. YXXXX = 190.	RN/L	* 3.506 ALPHAC 2.009 4.000 GRADIENT	T/Nd	7.500 ALPHAC 2.000 P.500 GPAD:ENT
	REFERENCE DATA	SREF = 5500.0000 SQ.FT. LREF = 327.7800 IN. BREF = 2348.0400 IN. SCALE = .0125		Z Q		ZQ		REFERENCE DATA	SREF = 5500.0000 SO.FT. LREF = 327.7800 IN. PREF = 2348.0400 IN. SCALE = .0125				ZO

AR 76	TABUL	TABULATED SOURCE DATA	•	CA238					PAGE	539
		ARC	14-120(CA23B)	38) 747/1 ATI	0351	(CARRIER DATA)		(PNHY33)	(17 OCT	T 75)
REFERENCE DATA	ITA							PARAMETR 1C	DATA	
5500.0000 SQ.FT. 327.7803 in. 2348.0400 in. .0125	XMRP YMRP ZMRP	н 1339.	.9000 IN. XC .0000 IN. YC .7500 IN ZC				BETA RUDDER 10RB E DY	. 000 . 000 . 000 . 000	STAB E ELEVON B DX B MACH B	5.000 .000 .600
		RN/L	3.30	GRADIENT INT	INTERVAL = -	-5.00/ 5.00				
20		10.000 ALPHAC 2.000 4.000 GRADIENT	DCL 10584 12067 00998	0CD 00374 00566 .0079	DCLM .09258 .09093	DCY 01072 01572	DCYN .00005 .00227	DCBL .00466 .00478		
		RN/L	3.30	GRADIENT IN	INTERVAL .	-5.00/ 5.00			÷	
20	•	15.000 ALPHAC 2.000 4.000 GRADIENT	DCL 08826 10317 01001	0CD 00276 00415	DCLM .07421 .07335	DCY 01141 01692 00296	00171 .00910 .00910	DCBL .00301 .00203		
		RN/L .	3.29	GRADIENT IN	INTERVAL = -	-5.00/ 5.00				
20	•	30,000 ALPHAC 2,000 4,000 GRADIENT	DCL 05706 06740 00773	DCD 00128 00159	DCLM .04279 .04279	DCY 01176 01511 00188	DCYN .00434 .00603	DCBL .00108 .00083		
		RN/L	3.30	GRADIENT IN	INTERVAL = -	-5.00/ 5.00				
20	•	45.000 ALPHAC 2.000 4.000 GRADIENT	DCL 03455 04846 00952	DCD 00011 00040	001M .02760 .02811	007 00756 00858 00075	DCYN .00327 .00380	DCBL .00030 .00069		
		RN/L	* 3.30	GRADIENT IN	INTERVAL = -	-5.00/ 5.00				
ZQ	п	50.003 ALPHAC 2.000 9.009 GRADIENT	DCL 034!4 00797	000 0004 00066 00366	000 M . 02520 . 02603 . 08803	DCY 00506 00577	0CYN .00348 .00310 .05000.	DCBL .00041 .00089		

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(G		00009										
(n)	DATA	STAB ELEVON DX MACH										
(PNHY34)	PARAMETRIC	000. 0000. 0000.		DCBL 00023 00041 00015		DCBL 00022 00018		DCBL 00026 00027		DCBL 00065 00026		DCBL 00025 00054 00050
		BETA RUDDER :: 10RB :: 0Y		0CYN 00012 00012		DCYN .00023 .00044		DCYN .00038 .00064 .00012		DCYN .00087 .00108		DCYN .00014 .00059
(CARRIET DATA)			-5.00/ 5.00	.00102 .00143	-5.00/ 5.00	.00022 00011 00038	5.00/ 5.00	DCY 00044 00023	-5,007 5,00	DCY 00054 00037	-5.00/ 5.00	0CY .00065 00007
AT1 0351			•	DCLM .08229 .07895	INTERVAL = -	DCLM .06565 .06336 .06937	INTERVAL = -	DCLM .05816 .05588 .00697	NIERVAL = -	DCLM .04585 .04497	INTERVAL = -	0CLM . 02591 . 02532
238) 747/1		υυ	GRADIENT INTERVAL	DCD 00128 00325	GRADIENT IN	DCD 00061 00240	GRADIENT IN	DCD 00053 00187	GRADIENT 'N	DCD 00001 00109	GRADIENT IN	DCD .00033 00019
ARC 14-120(CA238		.9000 IN. XC .0000 IN. YC .7500 IN ZC	3.31	DCL 10225 11996 01142	₹ 3.30	DCL 08913 10520 01060	3.30	736430 08430 08430	₹ 3.30	DCL 06944 08349	3,29	DCL 04628 05559 00721
AR		1339	RN/L	3.500 ALPHAC 2.000 4.000 GRADIENT	RN/L	7.500 ALPHAC 2.000 4.000 GRADIENT	RN/L	10.000 ALPHAC 2.000 4.000 GRADIENT	P.37/L	15.000 ALPHAC 2.000 4.000 GRADIENT	PHIL	30.000 ALPHAC Z.000 4.000 GRADIEHT
	ATA	XMRP YMRP ZMRP		•		u		•		at		•
	REFERENCE DATA	5500.0000 50.FT. 327.7800 IN. 2348.0400 IN.		Z 0		02		D2		2 0		2 C
		SPEF BREF SCALE										

j€ 54.1	1 25 1		5.000 .000 .000					1 75 J		5.000				
PAGE	34) (17 OCT	DATA	STAB ELEVON EDX	r				.30 (1) (8)	DATA	STAB E ELEVON # DX # MACH =				
	(PNHY34)	PARAMETRIC			DCBL .00003 00003		DCBL .00008 .00040	(1NH008)	PARAMETRIC			DCBL .00103 .00086 .00111		DCBL .00092 .00077 .00112
			BETA RUDDER : 10RB :		00013 00003 00003		DCYN 00003 .00004			BETA = RUDDER = 1CRB = DY	.00/ 5.00	00033 .00033 .00025 .00000	.007 5.00	00019 .00019 .00023 .66004
	(CARRIER DATA)			-5.00/ 5.00	DCY .00019 .00051	5.00/ 5.00	DCY .00022 .00078	(ORBITER DATA)			r R	.00186 .00186 .00217 .00134	я ГС	DCY .00111 .00123 .00098 .00012
	0351				DCLM .01703 .01740	1	DCLM .01531 .01524 .00808	AT1 0251 106			GRADIENT INTERVAL	DCLM .01187 .01158 .01528	GRADIENT INTERVAL	DCLM .00835 .00911 .01235 00425
CA238	38) 747/1 ATI			GRADIENT INTERVAL	000 .00018 00013	GRADIENT INTERVAL	000 00007 0003 2	747/1			3, 34 63,	000 00705 01039 01813	3.35 GR	DCD 00582 005830 01636
DATA -	14-120(CA23B)		9000 IN. XC 0000 IN. YC 7500 IN ZC	3.30	CCL 02910 03831 00716	≠ 3.30	DCL 02876 03390 00513	: 14-120(CA238)		.0900 IN. YO	RN/L =	0CL 02984 06931 11750 04451	FN/L =	100 100 100 100 100 100 100 100 100 100
TABULATED SOURCE	ARC		1339.	RN/L	45.000 ALPHAC A.000 4.000 GRADIENT	RN/L	50.000 ALPHAC 2.000 4.000 GRADIENT	ARC		# 1109 # 375	0, 0, 0	ALPHAO 6.000 8.000 10.000 6RADIENT	0. 97.0	AL P140 6.000 8.000 8.000 0.000 0.000 0.000
TABU		DATA	XMRP YMRP ZNPP		•		•		DATA		CN NO.	3.500 3.500 3.500 3.500	BCN NO	02 7.500 7.500 7.500
MAR 76		REFERENCE DATA	5500.0000 SC.FT 327.7803 IN. 2348.5400 IN. .0125		20		20		REFEPENCE DATA	2690.0000 50.FT 474.8100 IN. 936.6800 IN.				
DATE 23 h			SREF # LREF # BREF # SCALE #							SREF * LREF * PREF *				

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(8)	. V		ELEVON MACH										
O O CHAIL	PARAMETRIC	000	6.000 .000		DCBL .00069 .00041 .00090		DCBL .00057 .00042 .00091		CCBL .00034 .00023 .00055		DCBL .00033 .00022 .00029		DCBL .00024 .00036 .00041
=		BE TA =	RUDDER = 10RB = DY	-5.00/ 5.00	DCYN .00001 00004 00004	.00/ 5.00	.00003 .00003 .00003 .00003	.00/ 5.00	DCYN 00010 00008 00018	00/ 5.00	DC YN 00014 00012 00024	00/ 5.00	DCYN 00019 00003 000024
(ORBITER DATA)				M	. 00035 - 00087 - 00087 . 00043	" ڻ	500045 00045 000525 000093	# 5	DCY 00006 00012 .00086	VAL = -5.007	DCY 00014 .00016 .00091	" Ř	DCY -, 00025 -, 00048 -, 00000 -, 00000
A71 0251 (0				GRADIENT INTERVAL	DCLM .00726 .00867 .01126	GRADIENT INTERVAL	DCLM .00582 .00704 .00994	GRADIENT INTERVAL	DCLM .00391 .00544 .00740	GRADIENT INTERVAL	DCLM .00277 .00418 .00573 00359	GRADIENT TITEPVAL	00271 .00338 .00519 00570
17646 (88)				3.35 GR	0000 00527 00880 01557	3.35 GR	000 00437 00776 01381	3.35 GR/	000 00268 00511 00954	3.34 GF4	DCD 00154 00349 00583	3.33 GRA	DCD 00133 00292 00592 00655
ARC 14-120(CA23B		z:	375.0000 IN. 20	RN/L .	DCL 02369 06125 10749 04611	EN/L =	DCL 02494 06138 16059 04711	RN/L =	0CL 02255 04687 08042	RN/L +	DCL 62209 03717 96073 94649	RN/L .	DCL 01841 03332 05722
ARC		. ,		0 .0 0	ALPHAO 6.000 9.000 10.000 GRADIENT	0 00 0	AL PHAO 6.000 8.000 10.000 GRADIENT	0 /0 .0	AL PHAO 6.000 8.000 10.000 GRADIENT	0 : 0	ALPHAO 5.000 8.000 10.000 GRADIENT	0 /0 .	ALPHAO 6.000 8.000 10.000
	REFERENCE DATA	S z	ż	RUN NO	02 10.050 10.050 10.000	ON NOE	02 15.600 15.000 15.000	RUN NO	DZ 30.000 30.000 30.000	ON INO	20 000 000 000 000 000	RUN NO	07 00 00 00 00 00 00 00 00 00
		ни	BREF # 936 SCALE #										

TABULATED SOURCE DATA - CAZ3B
DATE 23 MAR 76

SREF # LPEF # BREF # SCALE #

MAR 76	TABULATED	ATED SOURCE	DATA - CAZ3B	338					PAGE	E 543
		ARC	14-120(CA23B	381 747/1 AT1	0251	(ORBITER DATA)		(TNH009)	9) (17 007	t 75 1
REFERENCE DATA	DATA							PARAME TRIC	DATA	
2690.0000 SQ.F 474.8130 IN. 936.6800 IN.	T. XMRP YMRP ZMRP	1109 875	9.0000 IN. XO .0000 IN. YO 5.0000 IN. ZO				BETA RUDDER 10RB DY	. 000 000 · 8	STAB = ELEVON = DX #	5.000 5.000 .600
	RUN NO	0 /0 .	RIVL #	3.34 GRA	GRADIENT INTERVAL	VAL # -5.00	00.5 /00			
	52 3.500 3.500 3.500	ALPHAO 8.000 10.000 12.000 GRADIENT	DCL 01518 05613 10957 04451	000 00528 01136 02550	DCLM .00900 .01174 .01638	00291 .00207 .00207 .00220	DCYN .00025 .000033	DCBL .00104 .00173 .00061		
	NON NO	0 /0	ENT =	3.35 GR#	GRADIENT INTERVAL	ا ا	007 2.00			
	7.500 7.500 7.500	ALPHAO 8.000 10.000 12.000 GRADIENT	551 01496 06133 10467	DCD 00366 01113 02390	CCLM .00636 .01011 .01445 30425	DCY .00190 .00205 .00226	DCYN .00003 00000 \$40000	DCBL .00086 .00141 .00057		
	RCN NO	0 00 0	BN/L *	3.35 CR/	GRADIENT INTERVAL	- 5.	00/ 5.00			
	02 10.000 10.000	ALPHAO 8.000 19.000 12.000 GRADIENT	500 06358 05683 18963 04611	000 -,00520 -,01105 -,02569	DCLM .00685 .00894 .01313	00123 .00243 .00243	#0000. #0000.	DCBL .00056 .00119 .00056		
	PUN NO	3. 0/ 9	PIVE =	3.35 GR,	GRADIENT HATERY	£. = -5	.007 5.00			
	52 15.000 15.000	ALPHED 8,000 10,000 12,000 6PADIENT	.02637 .05537 .05382 03871	000 -,00453 -,01038 -,02099	DCI M - 2005.42 - 200764 - 100557	00003 00003 00072 00194	00083 00083 00089 00067	DCBL .00051 .00091 .00045		
	PUN NO	0 /0 .0	17:16	3.35 GR	GRADIENT INTERVAL	" "	.00/ 5.00			
	52 20.000 30.000 30.000	ALPH40 8.000 10.000 12.000 0PA0154T	CCL -, 01958 -, 05025 -, 07346 -, 2478	DCD 00263 00658 01353	00332 .00332 .00551 .00838 00317	000003 .00160 .00160 .00252	DCYN 00025 00035 00088	DCBL .00017 .00062 .00007		

· (600H)	∀ ‡₹	60 T					100		വഹ				
Ę		ELE OX MAC					(0)	DATA					
)	TR.	900 0		DCBL .00016 .000045 .00001		DCBL .00008 .00021 00002	10H0	PARAME TR10	000.8		#1000 #5000. #5000. #5000.		DCBL .00046 .00089 .00047
-		90006R # 10RB # 00YB # #	00/ 5.00	DCYN - 000014 - 000041 - 000000	00/ 5.00	DCYN 00014 00095 00005			BETA = RUDDER = 10RB = 10Y	10/ 5.00	DCYN .00020 00036 00049	0/ 5.00	DCYN .00005 00057 .00065
			* സ	.00103 .00157 .00279 .00079	* *	DCY .00147 .00172 .00266				н	00276 .00276 .00153 .00203	" ئ	00144 .00143 .00193 .00193
A*: 0251 (0			AD LENT INTE	DCLM .00258 .00404 .00584	ADIENT INTER	DCLM .00281 .00371 .00506	0251				DCLM .01110 .01195 .01593		DCLM .00900 .01033 .01399 00425
1747 (85:			3.34 GR	DCD 00162 00465 00810	3.33 GR	DCD 00111 00388 00685 00685	1747/1			3.33 GR/	DCD 00558 01027 02308 0679	3.32 GRA	DCD 00454 00933 02051
		00000 00000 1N.	RN/L =	DCL 01829 04308 05644 04649	RN/L =	DCL 01271 03660 05147 04612			żżż	RN/L =	00L 00912 05553 09620	RN/L =	DCL 01195 05278 09380 04552
ARC		375	0 0 0	ALPHAO 8.000 10.000 12.000 6RADIENT	0 00 0	ALPHAO 8.000 10.000 12.000 6RAD1ENT	ARC		# 1109 # 375	0 / 0	ALPHAO 8.000 10.000 12.000 0RADIENT	0 /0 %	ALPHAO 8.000 10.000 12.000 68.401ENT
	REFERENCE DATA	2690.0000 50.FT. XMR 474.8:00 IN. YMR 936.6800 IN. ZMR	BUN N	02 45.000 45.000 45.000	NO.	52 50.000 50.000 50.000		REFERENCE DATA	30.000 SQ.FT. 74.8100 IN. 36.6800 IN.	P. N.S.	73 3.500 3.500 3.500	ON NOG	02 7.500 7.500 7.500
٠		SPEF BREF SCALE SCALE							SREF PREF SCALE =				
	747/1 A** 0251 (ORBITER DATA)	ARC 14-120(CA23B) 747/1 AT: 02S1 (ORBITER DATA) (TNHOO9	### REFERENCE DATA REFERENCE DATA PARAMETRIC THOROGO THOR	# 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO	# PARAMETRIC # 2690,0000 50.FT. XMPP = 1109,0000 IN. XO # 474.6:00 IN. YO # 474.6:00 IN. YORP = .0000 IN. XO # 474.6:00 IN. YORP = .0000 IN. XO # 5000 IN. ZMPP = .0000 IN. ZO # 575.0000 IN. ZO # 575.000 IN. ZO # 575.000 IN. ZO # 5.000	#EFERENCE DATA # REFERENCE DATA # FFERENCE DATA # 6690.0000 SO.FT, XMPP = 1109.0000 IN. XO # 474.8:00 IN. YOR = .0000 IN. XO # 474.8:00 IN. YOR = .0000 IN. XO # 575.0000 IN. ZMPP = 3.34 GRADIENT INTERVAL = -5.007 5.00 # 576.000 IN. ZMPP = 3.34 GRADIENT OCCUPATION OCCUPAT	# PARAMETRIC # PEFERCE DATA # REFERENCE DATA # REPARA # REPARA # REFERENCE DATA # REPARA # REPARA # REPARA # REFERENCE DATA # REPARA REFERENCE DATA REFERENCE DATA REFERENCE DATA PARAMETRIC PARAMETRIC	REFERENCE DATA SECRETARIES PARTICIO PARAMETRICE PAR	The parameter The paramete				

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PAGE	0) (17 OCT	DATA	STAB ELEVON BOX										
	(TNHOID)	PARAMETRIC	000. 000. 80.000		DCBL .00057 .00119 .00073		DCBL .00036 .00087 .00036		DCBL .00016 .00069 .00036		DCBL .00009 .00004 00007		DCBL .00015 .00046 00005
			BEIA RUDDER IORB DY	0/ 5.00	DCYN .00000 00016 00071	.007 5.00	DCYN 00018 00035 00082	.00/ 5.00	DCYN 00029 00052 00097	.00/ 5.00	DCYN - 00003 - 00003 - 00000 - 00000	.007 5.00	DCYN 00017 00094 00086
	(ORBITER DATA)			VAL = -5.00/	. 00070 . 00149 . 00198	* .5	00005 00005 .00078 .00138	* 5	DCY 00062 .00092 .00073	ار د	00008 .00174 .00159	5	DCY .00025 .00188 .00204
	0251			GRADIENT INTERVAL	DCLM .00734 .00916 .01263	GRADIENT INTERVAL	DCLM .00632 .00780 .01090	GRADIENT INTERVAL	DCLM .00455 .00580 .00805	GRADIENT HUTERVAL	50400 .00467 .00467 .00501	GRADIENT INTERVAL	DCLM .00351 .00387 .00541
38	B) 747/1 ATI			3.32 GRA	DCD 00397 00869 01853	3.32 GRA	DCD 00340 00782 01688	3.33 CRI	DCD 00166 00433 01068	3.33 GR	000 00083 00191 00554	3.32 GR	DCD 00051 00198 00409
DATA - CA238	14-120(CA23B)		.0000 IN. XO .0000 IN. YO .0000 IN. ZO	RN/L =	DCL 01473 05048 08654 04611	PN/L =	DCL 0.291 04944 08281	RN/L	DCL 00777 03449 06201 04785	R:1/L =	DCL D0190 02309 04379	PN/L =	000 - 000 - 000 - 000 - 000 - 000 - 000 - 000
TED SOURCE DATA	ARC		1109	0 /0	ALPHAO 8.000 10.000 12.000 GRADIENT	0 /0 .	ALPHAO B.066 10.060 12.000 GRADIENT	0 /0	ALPHAO 8.000 10.000 12.000 GRADIFNT	0 / 0	ALPHAO B.C39 10.000 12.000 GRADIENT	0, 0, 0	ALPHAO 8.000 13.905 12.000 0PADIENT
76 TABULATED	ļ	REFERENCE DATA	2690.0000 SQ.FT. XMRP 474.8100 IN. YMRP 936.6800 IN. ZMRP .0125	AUN NO	02 10.000 10.000	RUN NO	02 15.000 15.000	RUN NO	DZ 30.000 30.000 30.000	RUN NO	52 24, 000 45, 000 45, 000	RUN NO	02 50.000 50.000 50.000
DATE 23 MAR			SREF # 269 LREF # 47 BREF # 93 SCALE #										

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ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITE" DATA)

(TNH011)

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C DATA	STAB = ELEVON = DX HACH =	r									
PARAME TRIC	0000.		DCBL .00094 .00104 .00094		DCBL .0008B .00077 .00073		DCBL .00071 .00073 .00063		DCBL .00053 .00064 .00059 00006		008L .00021 .00031 .00028
	BETA RUCDER TORB DY	00/ 5.00	00 YN .00011 .00021 .00015	00/ 5.00	DCYN .00018 .00012	00/ 5.00	DCYN .00023 .00015 .00016	0/ 5.00	DCYN .00027 .00025 .00021	0/ 5.00	DCYN .00006 .00009 .00007
		!VAL = -5.007	. 00115 . 00136 . 00037 . 00097	"VAL = -5.007	DCY .00109 .00094 .00145	VAL = -5.007	. 00158 . 00101 . 00083	VAL = -5.00/	DCY .00167 .00116 .00075	VAL = -5.00/	DCY .00062 .00019 .00000.
		GRADIENT INTERVAL	DCLM .01256 .01210 .01181	GRADIENT INTERVAL	DCLM .00992 .00951 .00934	GRADIENT INTERVAL	DCLM .00855 .00846 .00841	GRADIENT INTERVAL	DCLM .00687 .00711 .00775	GRADIENT INTERVAL	DCLM .00465 .00537 .00645
		3.34 CR	DCD 00668 01038 01480	3.35 GR/	DCD 00641 01352 00507	3.25 GRA	DCD -,00605 -,00874 -,01289	3.35 GRA	0CD 00498 00765 01142	3.35 GRA	00359 00479 00756 00366
	109.0000 IN. YO .0000 IN. YO 375.0000 IN. ZO	RN/L .	DCL 03110 07298 11267 04451	FN/L #	DCL -,02509 -,06533 -,10474 -,04555	PN/L *	DCL 02427 05189 10168	R:4/L =	DCL 02206 05725 09384 04711	EN/L =	0cL 01853 04517 07081
	a n n	0 00 0	ALPHAO 4.000 6.000 8.000 GRADIENT	0, 0	ALPHAO 4.000 6.000 8.000 GRADIENT	0 '0	ALPHAD 4.000 6.000 8.000 GRADIENT	0 / 0 .	AL FHAO 4.000 6.000 8.000 GRADIENT	0 /0 .	ALPHAO 4.000 6.000 8.000 GRADIENT
REFERENCE DATA	2690.0000 SO.FT. XMAP 474.8.00 in. YMAP 936.6800 in. ZMAP .0125	RUN NO.	02 3.500 3.500 3.500	RUN NO.	02 7.500 7.500 7.500	RUM NO	00 10,000 10.000 10.000	PUN NO	02 15.000 15.000 15.000	RUN NO	20 30.02 30.00 30.00 30.00
	58EFF BREFF 5CALE 5CALE										

547	-1.000 5.000 .5000					1 75 1		5.000 .000 .600				
PAGE) (17 OCT	# # # # NO mo I					3) (17 OCT	DATA	STAB ELEVON DX MACH				
(TNHO11)			00017 .00027 .00025 .00025		DCBL .00018 .00028 .00029	(TNH013	PARANE TRIC	000.		DCBL .00121 .00117 .00147		DCBL .00112 .00100 .00136
۵	BETA = RUDDER = 10RB = DY	/ 5.00	00000 00000 00000	2.00	00005 .00001 .00011			BETA F RUDDER F TORB F DY	5.00/ 5.00	00000. 000000. 000000.	.00/ 5.00	DCYN .00015 .00020 .00008
TER DATA)		AL = -5.00/	. 00017 . 00016 . 00100 . 00100	AL = -5.00,	00007 .000042 .00123	(ORBITER DATA)			"	.00016 .00115 .00115 .00021	AL = -5	00014 .00031 .00013
0251 (ORBITER		GRADIENT INTERVAL	DCLM .00336 .00450 .00565	GRADIENT INTERVAL	DCLM .00294 .00427 .00544	AT1 0251 (OR			GRADIENT INTERVAL	DCLM .01230 .01296 .01594 .01624	GRADIENT INTERV	DCLM .00929 .01031 .01339
747/1 AT1		.34 GRAD	000 00314 00325 00481	. 33	DCD 00158 00284 00399	1/247	•		3.33 GRA	DCD 00553 00916 01689	3.32 GR/	000 00528 00972 00507
DATA - CA23B	00 00 X X X X X X X X X X X X X X X X X	RN/L = 3	888 888 888 888 888 888 888 888 888 88	FN/L = 3	0CL 01203 02703 03915	(020,000,000)	17.70.001.51	.0000 IN. XO .0000 IN. YO .0000 IN. ZO	RN/L =	DCL 01616 05960 10887	RN/L *	DCL 01810 05844 10192 04552
JRCE	# 1109.0030 # 50000 # 375.0000	0 0	0 0000 F	0 %	88897		AHL	1109	0 /0	ALPHAD 6.000 9.000 10.000 GRADIENI	0, 0	ALPHAO 6.000 8.000 10.000 GRADIENI
TABULATED SOU	E DATA XMRP XMRP ZMRP	2	02 45.000 45.000 45.000	NON NO				ICE DATA 1. YMRP 1. YMRP 1. ZMRP 1.	2	02 3.500 3.500	ON N	
: 23 MAR 76	REFERENCE DATA F = 474.8100 IN. F = 935.6930 IN.	# L J						REFERENCE SPEF * 2690.0000 SQ.FT LREF * 474.8100 IN. PHEF * 936.6900 IN.	# 1.4			
DATE	SREF LREF BREF	70S						שַּׁבַ מַּ	ហ			

ARC 14-120(CA238) 747/1 ATI 0251 (ORBITER DATA)

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(TN-013)

		1000 000 000 000 000 000										
	DATA	MACH										
	PARAMETRIC			DCBL .00093 .00121		DCBL .00979 .00081 .00107		DCBL .00029 .00045 .00076		DCBL .00052 .00044 .00063		DCBL .00052 .00061 .00076
		BETA RUDDER I IORB	-5.00/ 5.00	DC YN . 00023 . 00008 . 00004	.00/ 5.00	DCYN .00001 .00001 00005	00/ 5.00	DCYN 00010 00009 00002	5.00/ 5.00	00008 00001 000016 00016	5.00/ 5.00	DCYN 00006 .00004 00013
			•	DCY .00038 00037 00001	INTERVAL5.	DCY -,00026 -,00052 -,00020	RVAL = -5.00/		4	00.7 000.64 000.16 000.33 000.33	"	00.7 00098 0000. 00000.
			GRADIENT INTERVAL	00826 .00974 .01266	GRADIENT INTE	DCLM .00738 .00816 .01104	GRADIENT INTERVAL	DCLM .00574 .00997 .00997	GRADIENT INTERVAL	DCLM .00511 .00519 .00748 00359	GRADIENT INTERVAL	DCLM .000444 .00581 .00581
		000	3.32 GF	DCD 00502 00858 01519	3.32 GR	000 -,00443 -,00726 -,01362	3.33 GR	000 00297 00516 00959	3.33 GR	000 -,00014 -,00003 -,00566 -,00566	3.32 GR,	DCD 00148 00294 00552 00563
		375.0000 IN. XO	RN/L .	0CL 01727 05713 09976	FN/L =	900 -, 01726 -, 03484 -, 09540 -, 04711	RN/L .	DCL 01261 04030 07405	RN/L #	DCL 01131 05039 05832 04649	RN/L =	DCL 01272 02731 05121
		 H # H	0. 0/0	ALPHAO 6.000 8.000 10.000 GRADIENT	0 / 0	ALPHAO 6.000 8.000 10.000 GRADIENT	0 0 0	ALPHAO 6.000 8.000 10.000 CRADIENT	0 /0 .0	AL PHAO 6.000 8.000 10.000 GRAD:ENT	0 / 0	ALPHAO 6.000 8.000 10.000 GRADIENT
REFERENCE DATA		236.6800 IN. 7MRP 936.6800 IN. 7MRP 7MRP 936.6800 IN. 2MRP	RUN NO.	D2 10.000 10.000 0000.01	PUN NO	02 15.000 15.600 15.000	ON NOW	02 30,000 30,000 30,000	ON NOW	02 45.030 45.000 45.000	RUN NO	02 50.000 50.000 50.000
	Sprc	1 H H 1										

TABULATED SOURCE DATA - CA23B
DATE 23 MAR 76

SREF **
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649 39	0CT 75 1												
PAGE	(17	DATA	STAB = ELEVON = DX =								·		
	(TNH020)	PARAME TRIC	0000.		DCBL .00055 .00065 .00052		0084 .00042 .00065 .00037		DCBL .00020 .00040 .00039		00007 .00007 .00047 .00035		DCBL 00001 .00039 .00006
			BETA RUDDER 1	00/ 5.00	00011 .00003 .00019 .00019	00/ 5.00	DCYN .00009 .00007	00/ 2.00	DCYN .00006 .00013 .0003.	00/ 5.00	DCYN - 000007 - 000005 - 000005	30/ 5.00	DC 7N 00012 00013 00003
	(ORBITER DATA)			NAL = -5.00/	0CY 00042 00032 000014	ا. ئر	007 00054 00017 00048	NAL = -5.01	50000. 50000. 50000.	1VAL = -5.0	DCY 00014 00026 00019	TVAL = -5.0	50005- 860001- 860001-
	AT1 0251 10F			GRADIENT INTERVAL	OCLM .01292 .01215 .01000	GRADIENT INTERVAL	DCLM .01037 .00941 .00797	GRADIENT INTERVAL	00011 000880 00695 00299	GRADIENT INTERVAL	. 00723 . 00723 . 00735 . 00890	GRADIENT INTERVAL	DOLM . 00431 . 00493 . 00494 . 00990
38	1 747/1			3.32 GRA	DCD 00368 00767 01167	3,32 GRA	DCD 00308 00693 01100	3.32 GRA	000 00258 00634 01038	3.30 CR/	000 00216 00530 00881	3.30 GR/	DCD 00057 00301 00572 00057
: DATA - CA23B	14-120(CA23B		0000 IN. YO 0000 IN. ZO	₽ 7/Nd	DCL 00990 05960 09517 04790	FN/L =	00074 05794 05794 03170	PK/L =	00048 05070 08958 04790	B1/1-		# TVNB	100 - (0055 - (05975 - (056488 - (0574)
ATED SOURCE	ARC		# 1109. # 375.	0 /0	ALPHAO 4.000 6.000 8.000 GRADIENT	0 00 0	ALPHAO 4.000 6.000 8.000 GRADIENT	0 00 0	ALPH40 4.000 5.000 8.000 GPADIENT	0,0	AL PHYO 6. COO 8. COO 6RADIENT	0, 0, 0	ALPVAO 4, COD 6, COD 8, COD 8, COD
TABULATED		E DATA	FT. XMRP YMRP ZMRP	RUN NO	3.500 3.500 3.500	RUN NO	02 7.500 7.500 7.500	RUN NO	13.000 10.000 10.000	RUN NO	02 15.000 15.000	RUN NO	02 30.000 30.000 30.000
4AR 76		REFERENCE DATA	2690.0000 SQ.F 474.8100 IN. 936.6800 IN.										

ARC 14-120(CA23B) 747/1 ATI 02SI (ORBITER DATA)

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کر روز		000. 000. 000.					(52 100		000.1-				
(03	DATA	ST. PELE MACI					(17)	A 1 A C					
(1NH020)	PHISTRIC	0000.	٠	DCBL .00015 .00032 .00009		DCBL .00023 .00032 .00012	(TNH02	PARAMETRIC	0000.		DCBL .0005+ .0007+ .0000-		008L .0003Z .0007Z .00038
=		BETA RUDDER I 10RB	.00/ 5.00	-, 00015 -, 00010 -, 00007 -, 00007	.00/ 5.00	-,00018 -,00008 -,00010	-		BETA == RUCDER == 10RB == DY	.00/ 5.00	DCYN - 00003 - 00009 - 00011	.00/ 5.00	NAUG 60000: 60000: -
CORBITER DATA			i.	0CY 00097 00117 00077	። የ	DCY 00126 00117 00089	(ORBITER DATA)			٠. رئ	DCY .00007 .00027 .10030.	ı,	00000 00000 000002 000002 000005
AT1 0251 (C			GRADIENT INTERVAL	DCLM .00283 .00359 .00359	GRADIENT INTERVAL	DCLM .00238 .00289 .00589	AT1 0251 (0			GRAIDIENT INTERVAL	DCLM .01421 .01362 .00230	GRADIENT INTERVAL	DCLM .01133 .01105 .00958 00290
38) 747/1			3.30 GR	0CD 00001 00190 00384	3.29 GR	.00006 00161 00161 00326 00021	747/1			3.34 GR	000 00559 00915 01290	3.33 GR/	00517 00517 00844 01213
14-120(CA23B)		3.0000 IN. XO .0000 IN. YO	RN/L =	DCL 00219 03306 05180	PN/L =	DCL 00255 03184 04729 04720	14-120(CA23B)		0000 IN. YO 0000 IN. YO 0000 IN. ZO	R11/L =	DCL 01390 05894 09467 04790	EN/L =	000 01539 05656 09067 04793
ARC		1109	0 00 0	ALPHAO 4.000 6.000 8.000 GRAD!ENT	0 0 0	ALPHAO 4.000 6.000 8.000 6ADIENT	ARC		1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 /0	AL PHAO 4.000 6.000 8.000 0PAD:[5:1	0 /0 .	ALPHAO 4.000 6.000 9.900 0PAD!E11
	REFERENCE DATA	SREF = 2590.0000 SQ.FT. XMRP LREF = 474.8100 IN. YMRP BREF = 935.6800 IN. ZNRP SCALE = .0125	RUN NO	02 45.000 45.000	RUN NO	52 50.000 50.000 50.000		REFERENCE DATA	SREF * 2690,0500 SO.FT. XMRP LMEF * 474,8100 lN. YMRP RMEF * 935,5500 lN. ZMRP SCALE *	RUN NO	02 3.500 3.500 5.500	RUN NO	02 7.503 7.500 7.500

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PAGE 551	(TNH02:) (17 OCT 75)	PARAMETRIC DATA	.000 STAB = -1.000 .000 ELEVON = .000 4.000 DX = .000 .000 MACH = .600
		PARA	BETA RUDDER NI LORB I L
	ARC 14-120(CA238) 747/1 ATI 02SI (ORBITER DATA)		
TABULATED SCURCE DATA - CA23B	ARC 14-120(CA23B)	17A	XMRP = 1109.0000 IN, XO YMRP = .0000 IN, YO ZMRP = 375.0000 IN, ZO
DATE 23 MAR 76		REFERENCE DATA	SREF = 2690.0000 50.FT. LREF = 474.8100 IN. BREF = 936.6800 IN. SCALE = .0125

STAB ELEVON EDX MACH E										
0000		DCBL .00028 .00064 .00034		DCBL -,00005 .00048 .00034 -,00007		DCBL .00018 .00027 .00018		DCBL .00031 .00030 .00033		DCBL .00032 .00032 .00041
BETA RUDDER I	00/ 5.00	DCYN 00003 .00016 .00003	00/ 5.00	DCYN -,00009- -,00000,-	-5.007 5.00	DCYN 00014 00008 00000	-5.00/ 5.00	- 000034 - 000034 - 000019 - 0000019	-5.00/ 5.00	50000
	NAL = -5.00/	.00011 .00009 .000034	7VAL = -5.00/	DCY .00004 00066 00021	įI	DCY 00077 00394 00059	#1	007 00174 00164 00153	H	DCY -, no.rc6 -, uo.198 -, 00.187 -, 00.02
	GRADIENT INTERVAL	DCLM .00965 .00994 .00872	GRADIENT INTERVAL	DCLM .00827 .00852 .00758	GRADIENT INTERVAL	00520 .00520 .00511 .00579	GRADIENT INTERVAL	DCLM .00373 .00498 .00483	GRADIENT INTERVAL	DCLM .00337 .00468 .00455 00500
	3.33 GR	000479 00798 01149	3.32 CR	00000 00678 00994	3.34 GR	000 -,00221 -,00648 -,00648	3.32 GR	000 00095 00260 00434	3.32 OF	DCD 00055 00208 00370 00370
000 IN. X0 000 IN. Y0 000 IN. Z0	RN/L *	DCL 01598 05370 08742	FN/L =	OCL 00925 04865 06049	RN/L	001 00309 03787 06251	EN/L	201 -,00693 -,02615 -,04818	1.74 1.44 1.44 1.44 1.44 1.44 1.44 1.44	DCL -,00650 -,04358 -,04358
1109.0000 2000 375.0000	0 /0	ALPHAO 4.000 6.000 8.000 GRADIENT	0 /0	ALPHAO 4.000 6.000 8.000 GRADIENT	0 0	ALPHAO 4.000 6.000 8.000 GRADIENT	0	AL PHAD 4.0000 6.000 6.000 6PADENT	o ò	ALPHAD 4.070 6.000 8.000 6.000
SO.FT. XMRD IN. YMRP IN. ZMRP	RUN NO.	02 10.000 10.000 10.000	RUN NO.	02 15.000 15.000 15.000	RUN NO.	20 30.000 30.000 30.000	ON NOW	022 45.000 45.000	RUN NO.	50.000 50.000 50.000 50.000

TABULATED SOURCE DATA - CA238

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER SATA)

(*) (*)

(CS0H2)

	0000 0000 0000										
PARAMETRIC	000.8		DCBL .00032 .00057 .00096		DCBL .00023 .00053 .00065		DCBL .00016 .00008 .00039		DCBL .00010 .00026 .00038		DCBL .00003 00017 .00024
	BETA BUDDER BOY	-5.00/ 5.00	DCYN 00008 00024 00021	00/ 5.00	DCYN 00005 .00016 00027	00/ 5.00	DCYN .00002 .00013 00036	00/ 5.00	DCYN - 00019 - 00003 - 00018	.00/ 5.00	CCYN 00013 00008 00035
		u	.00096 00096 00036 00036	RVAL = -5.00/	DCY 00057 .00010 .00035	3VAL = -5.00/	DCY 00007 .00038 .00079	"	707 00125 00056 .00169	" ਪੈ	DCY 00086 00051 .00058
		GRADIENT INTERVAL	DCLM .01312 .01364 .02009 00290	GRADIENT INTERVAL	DCLM .01098 .01798 .00290	GRADIENT INTERVAL	DCLM .00946 .01068 .01637	GRADIENT INTERVAL	DCLM .00788 .01001 .01524	GRADIENT INTERVAL	DCLM .00503 .00769 .01248
		3.31 GR	DCD 00507 00857 02199 00021	3.31 GR	000 00436 00729 01982	3.31 GR	000 00312 00634 01818	3.31 GR/	000 00296 00577 01675 00021	3.31 GRA	DCD 00162 00388 01135
	109.0000 IN. YO 375.0000 IN. ZO	RN/L ≠	DCL 00124 03231 08264 04790	FN/L =	DCL .00080 03173 07618	RN/L =	DCL .00298 03160 07148	RN/L =	DCL 02150 02886 06665	RN/L =	DCL 00022 022!8 04790
	11 P1 p1	0.00	ALPHAO B.000 10.000 12.000 GRADIENT	0 00 00	ALPHAO 8.000 10.000 12.000 68ADIENT	0 /0 .0	ALPHAO 8.000 10.000 12.000 6PADIENT	0 76	4.PHAO 8.030 10.000 12.003 0RADIENT	0 /0	ALPHAO 8.050 10.990 12.090 CPACIENT
REFERENCE DATA	SPEF = 2690.0000 SO.FT. XMAP LPEF = 474.8100 lN. YMAP BREF = 936.6800 lN. ZMAP SCALE = .0125	ON NOW	02 3.500 3.500 3.500	NO NO	DZ 7.500 7.500 7.500	RCN NO	02 10.000 10.000	Of N. in	52 15.050 15.000 15.000	PUN NO	20 80.00.08 900.08 30.00.08

PAGE 553	(17 001 75)	⋖	MON H					(17 0CT 75)	A	.TAB = 5.000 LEVON = .000 X = .000 ACH = .500				
	(TNH022)	IC DAT	0 STAB 0 ELEVON 0 DX 0 MACH		70tt		7080	(1NH023)	IC DAT	0000		សិសិឌិក្		∸
	Ž	PARAMETR	0000. 0000. 8		DCBL .00004 .00014 .00036		DCBL .00018 .00018 .00030	N.	PARAMETR	9		008L .00096 .00058 .00038		0007 .0007 .0007 .0007
			BETA RUDDER LICRB CORB	00/ 2.00	DCYN 00016 00013 00033	.00/ 5.00	DCYN -,00005 -,00012 -,00024 -,00001	5		BETA RUDDER * 1088 *	00.5 /00.	00000 000000 000000 000000 000000	.00/ 5.00	10000 10000 10000
	(ORBITER DATA)			* .5.	DCY 00135 00116 .00018	" T	\$00000° \$1100°- \$1100°-	CORBITER DATA			INTERVAL = -5.	000030 000030 000033 00030	INTERVAL = -5.	007 - ,000943 - ,00036 - ,00036
	AT1 0251 (C			GRADIENT INTERVAL	DCLM .000-28 .00603 .01021	GRADIENT INTERVAL	DCLM .00380 .00546 .00932	AT1 0251 ((GRADIENT INTE	00CLM .01262 .01243 .01548	GRADIENT INT	DCLM .01017 .0:039
CA23B	38) 747/1			3.31 G	000 00090 00258 00851	3.31 GI	00074 -,00074 -,00226 -,00823 -,00021	381 747/1		000	3.31 G	000 00474 03776 91276	3.31 6	DCD 00453 03745 01191
OURCE DATA - CA	: 14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	OCL 00334 01757 03564 04790	FN/L .	DCL -,00467 -,013532 -,04799	14-120(CA23B)		0000 IN. YOU CO. 10000 IN. YOU	EN/L *	DCL 00012 04316 08094	RN/L =	DCL 00121 04069 07808
TABULATED SOURC	ARC		P = 1109.	0.00	ALPHAO B.000 10.000 12.000 GRADIENT	0 00 0	ALPHAO 8.000 10.000 12.000 GRADIENT	ARC		P * 1109 P * 375	0, 0, 0	ALPHAO 6.000 8.000 10.000 CRADIENT	NO. 0/ 0	ALPHAO 6.000 8.000
TABUI		REFERENCE DATA	SQ.FI. XMRP IN. YMRP IN. ZMRP	RUN NO	02 40,000 45,000 45,000	RUN NO	02 50.000 50.000 50.000		REFERENCE DATA	50.FT. XMRP IN. YMRP IN. ZMRP	BUN NO	02 3.500 3.500 3.500	RUN N	02 7.500 7.500 7.500
MAR 76		REFER	2590.0000 474.8100 935.6800						REFER	2690.0005 474.8120 935.6820 25125				
CATE 23 1			SREF "LPEF" SCALE "				and TO			SREF = LREF = RREF = SCALE =				

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA)

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(TNH023)

1		5.000 .000 .000 .600										
,	C DATA	STAB ECEVON B DX MACH	t									
	PARAME TRIC	.000. 000. 6.000.		DCBL .00072 .00025 .00020		DCBL .00074 .00017 .00019		DCBL .00055 .00019 .00010		DCBL .00045 .00026 .00029		DCBL .00060 .00019 .00039
		BETA RUDDER 10RB DY	00/ 5.00	00000. - 00000. - 00000.	00/ 5.00	00003 - 00003 - 000003 - 000003	5.00/ 5.00	- 00005 - 00005 - 00005 - 00007	00/8/00	0000-	00/ 5.90	DCYN 00015 00015
			RVAL5.00/	DCY 00067 00005 00005	RVAL = -5.00/	DCY 00061 00071 00008	ı ti	DCY 00105 00074 00034	7./AL = -5.00/	DCY 00164 00151 00093	ا د	00155 00123 00116
			GRADIENT INTERVAL	DCLM .00905 .00931 .01232	GRADIENT INTERVAL	DCLM .00768 .00925 .01106	GRADIENT INTERVAL	DCLM .00531 .00608 .00895 00290	GRADIENT INTERVAL	DCLM .00403 .00483 .00718	GRADIENT INTERVAL	DCLM .00376 .00473 .00671
			3.31 GR	DCD 00431 00714 01127	3.31 GR	000 00374 00516 01012	3.31 GR	000 -,00254 -,00431 -,00625	3.31 GR	DCD 00155 00282 00390	3.31 GR	DCD 00113 00237 00310
		00000 IN. YOU	RN/L	CCL 00391 94226 07382 04790	PN/L =	00405 03440 03440 07083	RN/L =	0CL 0C488 03401 05205 04790	PN/L =	DCL 00580 02701 03988	PN/L =	DCL 00771 02544 03749 04790
		и и под	0 00 0	ALPHAO 6.030 8.030 10.000 GRADIENT	0, 0	ALPHAO 6.000 8.000 10.000 GRADIENT	0 00 0	ALPHAO 6.000 8.000 10.000 GRADIENT	0 /0	ALPHAO 6.020 8.000 10.000 GRADIENT	0 /0	ALPHAO 6.000 8.000 10.000 0RAD[ENT
		= 2690.0000 SO.FT. XMRP = 474.8100 IN. YMRP = 936.6800 IN. ZMRP	RUN NO	DZ 10,000 10,000 10.000	RUN NO	02 15.000 15.000 15.000	RUN NO	DZ 30.000 39.000 30.000	RUN NO	02 45.000 45.000 45.000	RUN NO	50 50,000 50,000 50,000 50,000
		0.000 000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.										

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E 555	1 75)		-1.000 .000 .000 .600										
PAGE	17 OCT	IC DATA	STAB ELEVON BOX DX MACH								old were		7804
	(TNHO24)	PARAMETR	.000 .000 6.000 .000		DCBL . 000CG . 00044 . 00026 00007		DCBL .00063 .00041 .00017		DCBL .00073 .00037 .00011		00052 .00052 .00019 00008		.00034 .000034 .000009 000097
			BETA RUDDER 10RB DY	.007 5.00	0000 2 0000 6 .000010	00/ 5.00	DCYN .00001 .00013 .00017	.00/ 5.00	DCYN 00009- .00009 .00009	.00/ 5.00	DCYN 00001 00005 .00014	.00/ 5.00	DCYN 00008 00015 00000
	(ORBITER DATA)			٠ د.	00023 00038 00002	INTERVAL = -5.	DCY 00015 00042 .00043	ii.	.00085 .00016 .00016 .00016	INTERVAL = -5	CCY 00057 00066 00066	INTERVAL = -5	DCY 00088 00092 .00018
	AT1 0251 (OF			GRADIENT INTERVAL	DCLM .01270 .01304 .01590 00290	GRADIENT INTE	DCLM .01069 .01054 .01355	GRADIENT INTERVAL	00370 .01015 .01267	GPADIENT INTE	00703 .00793 .00853 .01141	GRADIENT INT	06200. - 00653 - 00654 - 00899
CA238	747/1			3.34 GR	000 -,00580 -,00914 -,01436 -,00021	3.33 GR	000 00549 00357 01316	3.33 CF	000 00511 00824 01273	3.32 G	000 -,00450 -,00756 -,01141	3.34 6	DCD 00281 00492 00709 00709
DATA -	4-120((0000 IN. XO 0000 IN. YO	RN/L =	DCL 00455 04391 08318	PN/L	DCL 00370 04355 07948 04790	H J/Nä	0CL 00409 04223 07895	RN/L =	DCL 00741 04183 07190	RN/L =	DCL -, 03391 -, 03158 -, 05311 -, 04790
TABULATED SOURCE	ARC		1109	0 /0 .	ALPHAO 6.000 8.000 10.000 GRADIENT	0 /0	AL PHAO 6.000 8.000 10.000 GRADIENT	0, 0	ALPHAO 6.000 8.000 10.000 GRADIENT	0 /0 .0	ALPHAO 6.000 8.000 10.000 GRADIENT	0 0 0	ALPHAO 6.000 8.000 10.000 GRADIENT
TABUL		DATA	THT. XMRP	PUN NO	52 3.500 3.500 3.500	PCN NO.	02 7.500 7.500 7.500	RCN NO	10.000 10.000 10.000	NON NO	52 15.030 15.000	RUN NO	52 33.000 30.000 30.000
AL 08 M 50 75	Š	TAC BONGRERATION	SREF * 2690.0000 SG. LREF * 474.8100 IN: BREF * 936.6800 IN: SCALE * .0125										

	740E 556	(17 001 75)		-1.000		. 600					
č			DATA	STAB	×O	HACH					
		(TNH024)	PARAMETRIC DATA	000.	6.000			č	.00037	00013	00007
		2		BETA - RUDDER -	1088 07		00/ 5.00	NA SO	00019	00003	. 00000
	****	MBIICH UAIA					RVAL = -5.) OC	00167	45000 · -	. 00002
	747/1 ATT 0251 (080) 1250						CHADIENT INTERVAL = -5.00/ 5.00	DCLM	51400.	00695	06 300 .
						2 7.0		200	00314	00461	
•	ARC 14-1201CA238)		2	.0000 IN. YO		· CXX		•	,	04161	į
1	ARC		•	375		0 /0		ALPHAO 6.000	8.000	10.000 GRADIENT	ò
		REFERENCE DATA		936.6800 IN. ZMRP		PUN NO.		05 45.000			2
			_	HREF # 474. BREF # 936. SCALE #							

ARC 14-120(CA23B) 747/1 ATI 02SI (ORBITER DATA)

DCBL .00021 -.00010 .00013

-.00022 -.00017 -.00010

-.00150 -.00098 -.00112

DCLM .00382 .00476 .00635

DCD -.00135 -.00280 -.00417

DCL -.00442 -.02308 -.03920

ALPHAO 6.000 8.000 10.000 GRADIENT

50.000 50.000 50.000

GRADIENT INTERVAL = -5.00/ 5.00

3.32

PN/L .

RUN NO. 0/ 0

(TNH025) (17 OCT 75)	PARAMETRIC DATA	STAB - 1.000	MACH								
Ż	PARAMETE	000.	. 000			DCBL	.00066	01000	0000-		DCBL .00029 .00036 .00024
₹		BETA RUDDER -	<u>'</u>	.00/ 5.00		DCYN	. 00027	11000		-5.00/ 5.00	DCYN .00008 .00011 .00008
מפון ובא כאון				.RVAL = -5.		DCY 000113	1,000.	69000.	unon.	RVAL = -5.	00038 .00003 .00003 .00081
CCS: CCS: CMGITER DAIA				GRADIENT INTERVAL = -5.00/ 5.00				70610.		GRADIENT INTERVAL =	DCLM .01026 .01152 .01760
•		200		3.34 05		000 00549	00925	02540		3.33 GA	DCD 00586 02677 0021
		2000 IN. YO	į	RN/L .	Š	00409	03293	06240*-	į	RN/L =	DCL 00389 03787 04575
		375, 0000		o \o	Al DLAD	8.000	10.000	RADIENT		o	ALP:40 B.000 10.000 12.000 GRADIENT
REFERENCE DATA		474.8100 IN. YMRP 936.6600 IN. ZMRP .0125	2 2 0		20		3.500 3.500				02 7.500 7.500 7.500

SREF = LREF = BREF = SCALE =

E 557	1 75)		-1.000 .000 .000 .600										
PAGE	5) (17 OCT	DATA	STAB E ELEVON B OX MACH - W										
	(TNH025)	PARAMETRIC	8.000 000.		DCBL .00005 .00025 .00037		DCBL 00009 00027 00027		DCBL 00006 .00015 .00046		DCBL .00002 .00003 .00055		DCBL .00027 .00017 .00017
			BETA RUDDER 10RB DY	.00/ 5.00	DCYN 000063 000022	00/ 5.00	DCYN -,000001 -,000031 -,000031	.00/ 5.00	DCYN 00008 00003 00030	00/ 5.00	DCYN 00009 000052 000032	.00/ 5.00	DCYN 00010 00007 00026
	(ORBITER DATA)			* ਨੈ		* .5.	000088 .000088 .00009.	g- ±	DCY 000146 00021 00023	NA! = -5.0	DCY 00070 00052 00013	ζ.	00119 00119 0006 15000.
	AT1 0251 (OR			GRADIENT INTERVAL	DCLM .00922 .01002 .01649	GRADIENT INTERVAL	DCLM .00804 .00959 .01541	GRADIENT INTERVAL	DCLM .00561 .00737 .01236 0590	GRADIENT INTERVAL	DCLM .00386 .00562 .01005	GRADIENT INTERVAL	DCLM .00328 .00530 .05530 06953
38	747/1			3.33 GRA	DCD 00549 00903 02072	3.32 GRA	DCD 00466 00804 01956	3.34 GRA	000 00305 00529 01372	3.32 GR	CCD	3.32 GR/	DCD 00158 00272 00927 00921
. DATA - CA238	14-120(CA23B)		00000 IN. YO	PN/L =	DCL 00316 04320 07980 04790	FN/L =	DCL 00537 03619 07485 04790	RN/L =	DCL 00463 03011 05592 04790	PRV L =	002040 -00564- -005640	RN'L =	DCL 09508 01849 03715
TABULATED SOURCE	ARC		8011 = 375	0 0 0	ALPHAO 8.000 10.000 12.000 GRADIENT	0 0 0	ALPHAO 8.000 10.000 12.000 CPADIENT	0 00 00	ALPHAO 8.000 10.000 12.000 GPADIENT	0 .0 .0	AL PHAO 8.000 10.000 12.000 GRADIENT	0 00 0	ALPHAO 8.000 10.000 12.000 5840(£11
TABUL		REFERENCE DATA	T. XMRP YMRP I. ZMPP	NON NO	02 10.000 10.000 10.000	NON NO	02 15.000 15.000	RCN NO	02 30.000 30.000 30.000	RUN NO	02 45.000 45.000	RUN NO	50.000 50.000 50.000
1AR 76		REFEREN	2690.0000 SQ 474.8100 IN 936.6800 IN										

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	-	C DATA	STAB ELEVON # DX MACH #										
CECOUNTY		PARAMETR1	000. 8		DCBL .00018 .00022 .00049		DCBL .00005 .00045 .00045		DCBL 00003 .00072 .00024		DCBL 00029 .00026 .00017		DCBL 00060 00024 .00012
-			BETA RUDDER I IORB II	.007 5.00	DCYN .00036 .00123 00009	5.05/ 5.00	DCYN .00034 .000010 00010	5.00/ 5.00	DCYN - 00042 - 000052 - 00009	.00/ 5.00	DCYN - 00000- 000007- - 000001-	.00/ 5.00	DCYN .00009 .00006 000026
0351 (ORBITER DATA)				* -5	007 .00033 .00238 00238	1	00150 .00150 .00234 .00282	,	DCY .00228 .00129 .00292		DCY .000254 .000256 .000256 00005	i,	00252 .00196 .00196 .00362
AT1 0351 (0				GRADIENT INTERVAL	DCLM .01424 .01458 .02560	GRADIENT INTERVAL	DCLM .01161 .01222 .01871	GRADIENT INTERVAL	DCLM .00938 .01024 .01558	SRADIENT INTERVAL	DCLM .00780 .00925 .01443	GRADIENT INTERVAL	DCLM .00443 .00598 .01147
38) 747/1	•			3.29 GR	DCD 00350 00693 02118 00547	3.29 GR	DCD 00359 00699 02041	3.29 GR	DCD 00346 01993 00302	3.29 JR	000 00422 00739 01890	3.29 GR/	DCD 00218 00447 01355
: 14-120(CA23B)			.00000 IN. YO	RN/L #	DCL 01151 09437 09157	FN/L =	DCL 01254 04592 06851 04155	RN/L #	DCL 01240 04638 08702 04310	- 1/NG	DCL 01634 04700 08152	RN/L =	DCL 01060 03596 06027 04833
ARC			# 1109 # 3 75	0 0 0	ALPHAO 8.000 10.000 12.000 GRADIENT	NO. 0/ 0	ALPHAO 8.000 10.000 12.000 CRADIENT	0 00 0	ALPHAO 8.000 10.000 12.000 GRADIENT	0 0 0	ALPHAO 8.000 10.000 12.000 GRADIENT	0 0 0	ALPHAD 8.000 10.000 12.000 GRADIENT
	REFERENCE DATA		2690.0000 SO.FT. XMRP 471.8100 IN. YMRP 936.6800 IN. ZMRP	RUN NO	02 3.500 3.500 3.500	RUN N	02 7.500 7.500 7.500	RUN NO	000.01 00.000 00.01	ON NUS	02 15.000 15.000	RUN NO	52 30.000 30.000 30.000
			575 888 508 8 8 8 8 8										

559	75)		5.000 .000 .000 .000					1 25 1		5.000				
PAGE	7) (17 007	DATA	STAB ELEVON DX DX MACH					34) (17 OCT		STAB ELEVON MEDX MACH ME				
	(TNH027)	PARAMETRIC	.000 .000 .000 .000		DCBL 00072 00018 .00037 000037		DCBL 00076 00014 .00052	(78 DHNL)	PARAME TRIC	. 000 		00056 .00016 .00018 .00018		00018 .000018 .000018 .00018
			BETA RUDDER IORG	00/ 2.00	DCYN 00010 .00006 .000021	.00/ 5.00	DCYN .00007 .00003	_		BETA RUDDER BIORB DY	.00/ 5.00	DCYN - 00007 - 00018 - 00044	-5.00/ 5.00	DCYN 00017 00008 .00025
	(ORBITER DATA)			L = -5.	. 00162 . 00212 . 00255 . 00028		DCY .00187 .00229 .00236	(ORBITER DATA)			ا. گ	DCY .00332 .00371 .00367 00023	4	00332 .00332 .00314 .000294 00015
	1520			GRADIENT INTERVA	.00511 .00587 .01044	GRADIENT INTERVAL	DCLM .00403 .00490 .01019	AT! 035! (OF			GRADIENT INTERVAL	DCLM .01903 .01713 .01916	GRADIENT INTERVAL	DCLM .01416 .01250 .01284 .01684
38	B) 747/1 AT1			3.30 GRA	DCD 00129 00254 00962	3.30 GRA	DCD 00122 00228 00832	747/1			3.29 69.	DCD -,00546 -,03908 -,01492	3.29 GR	000 00498 00332 01389
0ATA - CA23B	14-120(CA23B			RN/L =	DCL .00026 02078 04148	EN/L ≠	DCL 00294 01945 03623	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	DCL 01786 05470 10183 03891	RN/L	DCL 01641 05169 03455 04155
ATED SOURCE	ARC		# 1109 # 375	0 /0 .	ALPHAO 8.000 10.000 12.000 GRADIENT	0 /0	ALPHAO 8.000 10.000 12.000 GRADIENT	ARC		= 1109. = 375.	0, 0	ALPHAO 6.000 8.000 10.000 5RADIENT	0 0 0	ALPHAO 6.000 8.000 10.000 GRADIENT
3 MAR 76 TABULATED		PEFERENCE DATA	# 2695.0000 SQ.FT. XMAP # 474.8100 in. YMRP # 936.6300 in. ZMRP .0125	NON NO	DZ 45.000 45.000 45.000	RUN NO	02 50.000 50.000 50.000		REFERENCE DATA	# 2690,0000 50,FT, XMRP # 474,9100 lN, YMRP # 935,6900 lN, ZMRP	RUN NO	DZ 3.500 3.500 3.500	RUN NO	02 7.530 7.530
DATE			SREF LREF BREF SCALE	,	ORIGINA OF POOS	r , 9	ach is Mulaití			SREF LREF RREF SCALE				

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(AFOHOL)		PARAMETRIC DAT	.000 STAB .000 ELEVE			DCBL 00002 00002 00002			DCBL 00011 00009			DCBL 00055 00047 00011		DCBL - ODON 7	2.00073 .00003 .00000		Į.	00015 00071 00021	60000
ê			BETA RUDDER I IORB	i	00.0 /00.			00.c /00.c-	00042 00016 00016	00 M		DCYN 00038 00000 00025	7,00 5,00	DCY .00	-,00028 -,00026 -,00000	.00/ 5.00	DCYN	00013	D DDDD .
(ORBITER DATA)					ı	DCY .00282 .00308 .00278		H	DCY .00243 .00309 .00274	ı	,	00237 .00307 .00328 .00228	Ħ	CY 0017	.00196 .00196 .00028	7	۵۲	.00178 .00173 .00534	30000.
0351				GRADIENT INTERVAL		DCLM .01181 .01022 .01322	GRADIENT INTERNAL		0010 .00710 .01048	GRADIENT INTERVAL		DCLM .00625 .00675 00875	GRADIENT INTERVA:	DCLM .00520	.00655 .00784 00493	GRADIENT INTERVAL	₩700	.00681 .00681 .00781	7
238) 747/1 ATI			000	3.29		DCD 00514 00797 01320	3.29		000 00749 00746 01206	3.29 GR		DCD 00293 00503 00813	3.30 GF/	DCD 00262	00545 00545 00141	3.30 GRA	aca	00227 00361 00474 00179)
ARC 14-120(CA23B)		:	09. 0300 IN. XO .0000 IN. YO \$75.0000 IN. ZO	RN/L =		DCL 01663 05337 09114 04310	P.N.L		DCL 01736 05103 08662 04577	RN/L =		DCL 01202 03756 06403 04833	RN/L =	DCL 90847	04397 04397 04582	RN/L =	DCL	01920 01920 03858	
ARC		1	YMRP = 1109. ZMRP = 375.	NO. 0/ 0		AL PHAO 6.000 8.000 10.000 GRADIENT	NO. 0/ 0		ALPHAO 6.000 8.000 10.000 GRADIENT	NO. 0/0		ALPHAO 6.000 8.000 10.000 GRADIENT	NO. 0/0	ALPHAO 6.000	10.000 GRADIENT	NO. 0/0	ALPHAO 6 000	8.000 10.000 GRADIENT	
	REFERENCE DATA	100 CO	936.6800 IN.	ON NOW	į	02 10:000 10:000 10:000 10:000	RUN		02 15.000 15.000 15.000	RUN		92 30.000 30.000 30.000	N.S.	02 25.000	5.00	RUN	02 000	50.000 50.000 50.000	
		SREF	LREF BREF SCALE																

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5.000 17 001 STAB ELEVON DX MACH PARAMETRIC DATA (TNH035) DCBL .00039 .00041 .00020 DCBL .00020 .00006 .00007 0000. DCBL .00043 .00059 .00029 DCBL .00046 .00022 .00003 DCYN .00037 .00028 .00024 DCYN .00039 -.00015 .00030 DCYN .00048 .00028 .00022 DCYN .00052 .00036 .00036 BETA RUDDER TORB DY GRADIENT INTERVAL * -5.007 5.00 GRADIENT INTERVAL = -5.00/ 5.00 GRADIENT INTERVAL = -5.00/ 5.00 -5.00/ 5.00 747/1 ATI 0351 (ORBITER DATA) . 00156 . 00141 . 00087 .00111 .00120 .00120 .00112 DCY .00077 .00056 .00096 .00214 .00184 .00136 GRADIENT INTERVAL = DCLM .00569 .00626 .00371 DCLM .01564 .01506 .01203 DCLM .01038 .01018 .00709 DCLM .00824 .00647 .00600 -.00589 DCD -.00299 -.00647 -.00979 DCD -.00241 -.00548 -.00859 -.00313 -.00700 -.01043 DCD -.00358 -.00737 -.01132 3.29 3.29 3.29 ARC 14-120 (CA238) 0000 1N. YO . 0000 375. 0000 1N. ZO DCL -.02033 -.06597 -.09756 0CL -.01238 -.04890 -.08142 DCL -.01822 -.06073 -.09303 -.04155 DCL -.01384 -.05231 -.09542 -.04310 FN/L * REV. . RN/L = 0 /0 ALFHAO 4.000 6.000 9.000 GRADIENT AL PHAO 4.000 6.000 8.000 GRADIENT 0 6 AL PHAO 4.000 6.000 8.000 GRADIENT 6 ALPHAO 4.030 6.030 8.000 GRADIENT 6 PUN NO. RCN NO. ACN NO. XMRP YMRP ZMRP N NO 02 10.000 10.000 02 15.000 15.000 15.000 02 3.500 3.500 3.500 02 7.500 7.500 7.500 REFERENCE DATA SO.FI. 2690.0000 474.8100 936.5800 SREF LPEF BREF SCALE

DCBL .00026 .00017 .00017

DCYN .00025 .00002 .00010

. 00011 . 00024 . 00027

DCLM .00271 .00408 .00328

DCD -.00117 -.00329 -.00534

.00989 .03656 .04833

ALFHAD 4.000 6.000 8.000 GRADIENT

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GRADIENT INTERVAL = -5.00/ 5.00

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7;) (5)	DATA	STAB ELEVON BOX					is) (23 oct	DATA	STAB = ELEVON = DX = MACH =				
(TNH035	PARAMETRIC	0000.		DCBL .00020 00011 00051		DCBL .00013 00062 00062	(TNH036	PARAME TRIC	.000 10.000 6.000		DCBL .00006 .00021		DCBL 00016 00038
		BETA RUDDER : 10R9 :	.00/ 5.00	DCYN .00005 000016	.00/ 5.00	DCYN0000600011			BETA RUDDER # TORB # DY		DCYN 00008 .00053		DCYN .00026 .00045 00011
(ORBITER DATA)			• •	DCY - 00039 - 00049 - 00068	i,	DCY 00051 00086 00091	(CRBITER DATA)			-5.00/ 5.00	00300. -00300. -000000.	5.00/ 5.00	DCY .00377 .00349 00023
AT1 0351 (O			GRADIENT INTERVAL	DCLM .00223 .00334 .00583	GRADIENT INTERVAL	DCLM .00214 .00314 .00379	AT1 0351 (0				DCLM .01623 .01746	INTERVAL = -5.	DCLM .01155 .01269 05748
1/242			3.30 62,	DCD00026001840032800141	3.30 GR	DCD .00001 00141 00270	747/1			GRADIENT INTERVAL	DCD 00713 01311	GRADIENT IN	DCD 00672 01204 00547
14-120(CA238)		.09.0000 IN. XO .0000 IN. YO 375.0000 IN. ZO	RN/L	00098 02753 03984 0588	FN/L =	DCL .00466 02542 03415	14-120(CA23B)		0000 IN. YO	= 3.31 (DCL 04879 09803 00000	* 3.30 (DCL 04323 08968 03891
ARC		0 H W	0 0 0	ALPHAO 4.000 6.000 8.000 CRADIENT	0 00 0	AL PHAO 4.000 6.000 8.000 GRADIENT	ARC		# 1169 # 375	PN/L	3.500 ALPHAO 9.000 10.000 GRADIENT	HN/L	7.500 ALPHAO 8.500 10.900 SPADIENT
	REFERENCE DATA	SREF = 2690.0000 50.FT. XMRP LREF = 474.8100 IN. YMRP BREF = 936.6800 IN. ZMRP SCALE = .0125	RUN NO	02 45.000 45.000	RUN NO	50 50.000 50.000		REFERENCE DATA	SREF = 2690.0000 SO.FT. XMRP LREF = 474.8100 IN. YMRP RREF = 936.6800 IV. ZWRP SCALE = .0125		z Z0		• 20

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(23	DATA	STAB : ELEVON : DX : MACH :										
(TNHO	PARAMETRIC	.000 10.000 6.000		DCBL 00010 .00005 00025		DCBL 00008 00004 00017		DCBL 00047 00026		DCBL 00056 00018		DCBL 00050 00019
		BETA # RUDDER # 10RB # DY		DCYN .00041 .00038		DCYN .00025 .00032		DCYN .00007 .00011		DCYN .00000 .00010		00000. - 00000.
RBITER DATA)			5.00/ 5.00	00.7 00384 0.00295 0.00015	5.00/ 5.00	DCY .00360 .00297 00010	5.00/ 5.00	DCY .00271 .00002-	5.00/ 5.00	007 .00225 .00279	5.00/ 5.00	00207 - 00207 - 00259 - 00500
AT1 0351				DCLM .00870 .01085	н	DCLM .00896 .00896	Ħ	DCLM .00510 .00535	11	DCLM .00435 .00586 00394		DCLM .00389 .00533 00493
		000	GRADIENT 1	DCD 00639 01124	GRADIENT IN	000 -,00549 -,003085	GRADIENT IN	000 00374 00583	GRADIENT IN	DCD 00185 00314	GRADIENT IN	000 00153 00194
		żżż	= 3.30	00CL -,04496 -,08657 -,04155	3.30	0CL 04311 07959 04310	3.29	02866 05698 05692	3.29	DCL 01920 03935	3.30	.01803 01803 03599 04582
AR		н н н	RN/L	10.000 ALPHAO 8.000 10.000 GRADIENT	RN/L	15.000 ALPHAO B.000 10.000 CRADIENT	RN/L	30.000 ALPHAO B.000 10.000 GRADIENT	RN/L	45.000 ALPHAO B.000 10.000 GRAD:ENT	RN	59.000 ALPHAO B.000 10.000 GREDIENT
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	03SI (ORBITER DATA) (TNH036) (23 OCT 7	14-120(CA23B) 747/1 ATI 03SI (ORBITER DATA) (TNH036) (23 OCT 7 PARAMETRIC DATA	### PARAMETRIC DATA ##################################	### PREFERENCE DATA ##################################	### PEFERENCE DATA ### PARAMETRIC	REFERENCE DATA REFERENCE DATA REFERENCE DATA REFERENCE DATA REFERENCE DATA RAPPETRIC DATA REFERENCE DATA RAPPETRIC DATA REFERENCE DATA REPARETRIC DATA ROUGH	PEFERENCE DATA PARMETRIC DATA PARM	REFERENCE DATA REPLACE DECLAR	## SECRETARY 1-1201CA23B) 747/1 AT1 0351 (ORBITER DATA) (TMH036) (23 OCT 7) ## SECRETARY 1109.0000 IN. XO 11. YO 11. Y	PREFERENCE DATA PRAMETRIC DATA PRAMETRIC DATA PARAMETRIC DATA PARAMETRIC DATA PARAMETRIC DATA PARAMETRIC DATA	## PEFFENCE DATA PEFFENCE DATA PARAMETRIC DATA PARAMETRIC DATA PARAMETRIC DATA PARAMETRIC DATA PARAMETRIC DATA	Perfence DATA Perfence DAT

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TABULATED SOURCE DATA - CA238

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57) (23 °	DATA	STAB # ELEVON # DX # MACH #										
(TNH037)	PARAMETR1C			DCBL .00048 .00017 .00041		DCBL .00018 00011 00003		DCBL .00016 .00001 .00002		DCBL 00003 00018 .00010		DCBL 00032 00034 000013
		BETA = RUDDER = TORB = DY		00058 .00017 .00017		0000. 0000. 0000. 0000.		00000. - 00000. - 00000.		DCYN .00002. .00003. .00013		00000 .00009 .000014
(ORBITER DATA)			-5.00/ 5.00	0039 00399 00399 00367	-5.00/ 5.00	DCY . 00311 . 00353 . 00258	-5.007 5.00	007 .00287 .00230 .00231	5.007 5.00	00239 .00309 .00300 .00185	5.007 5.00	007 .00175 .00231 .00234 50902
AT1 0351				.0183 .01711 .01863	INTERVAL =	DCLM .01268 .01209 .01445	INTERVAL =	DCLM .01074 .00957 .01239	INTERVAL = -	DCLM .00794 .00537 .00569	INTERVAL = -	DCLM . 00480 . 00770 . 00799
238) 747/1		0 0 0 X	GRADIENT INTERVAL	DCD 0044- 00880 01488	GRADIENT IN	DCD -,00456 -,00833 -,01364	GRADIENT IN	000 00431 01299 00392	GRADIENT IN	000 -,00384 -,01187 -,01187	GRADIENT IN	DCD +.00253 00488 00738
C 14-120(CA238)			* 3.32	DCL 0124 8 05834 10367	3,32	0CL 01332 05422 09400 03891	3.31	0CL -,01025 -,05664 -,09193	= 3.31	000 -,00819 -,05537 -,04834 -,04310	* 3.32	DCL -, 00732 -, 04208 -, 05407 -, 04577
ARC	٩	XMRP = 1109 YMRP = 375	RN/L	3.500 ALPHAO 6.000 8.000 10.000 GRADIENT	RNZ	A 7.500 ALPHAO 6.000 B.000 10.000 CPADIENT	FNYL	# 10.000 ALPHAO 6.000 8.000 10.000 GRADIENT	PN/L	# 15.000 ALPHAO 6.000 8.000 10.000 OPAD(ENT	PN	# 30.000 ALPHAO 6.000 8.000 10.000 CRADIEVI
	REFERENCE DAT	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		20		20		20		20		20

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					. 23	DATA	STAB ** ELEVON ** DX ** MACH **		
. 000 . 000 . 000 6. 000		DCBL 00036 00068 00006		DCBL 00027 00052 00009	CTNHO	PARAMETR1			00019 .00019 .00045 .00010
BETA RUDDER IORB DY		DCYN		DCYN .00014 .00002 00015			BETA ** RUDDER ** 10RB ** 0Y **		DCYN 00009 00005
	.007 5.00	DCY .00180 .00203.	00.5 /00.6	DCY .00160 .00153 .00158				5.00/ 5.00	00. 00218 00268 00352
	11	DCLM .00251 .00599 .00697	P	DCLM .00313 .05545 .065413 .06413	0351				DCLM .01854 .01811 .02049
		000 00198 00337 00469	SRADIENT INT	DCD 00160 00284 00378	1/447			SRADIENT IN	0000 01010 01077
9990 IN. XO 9900 IN. YO 9907 IN. ZO	3.32	DCL 01336 02421 04167	3.31	DCL 00025 02644 03793			0000 IN. XO 0000 IN. YO 0000 IN. ZO	= 3.33 (00191 04490 09743
= 1109. = 375.	RN/L	45.000 ALPHAO 6.000 8.000 10.000 GRADIENT	RN/L	50.000 ALPHAO 6.000 8.000 10.000 GRADIENT	ARC		# 1109. # 375.	RN/L	3.500 ALPHAO 6.000 8.000 10.000 GRADIENT
ATA XMR YMR ZMR		и		•		DATA	•		H
2690. 474. 935.		20		20		REFERENCE (SREF = 2690.0000 SO.FT. LREF = 474.8;00 1%. BREF = 936.6800 1%. SCALE = .0125		Z G
	REFERENCE DATA PARAMETRIC DATA 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = -1 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 1 938.6800 IN. ZMRP = 375.0007 IN. ZO IORB = 6.000 DX = 1 0.255 DY = .000 MACH = 1	#EFERENCE DATA # 2690.0500 SQ.FT. XMRP = 1109.0000 IN. XO # 474.8100 IN. YMRP = .0000 IN. YO # 938.6800 IN. ZMRP = 375.0007 IN. ZO E 938.6800 IN. ZMRP = 3.32 GRADIENT INTERVAL = -5.007 5.00	# FERENCE DATA # 7850.0000 SQ.FT. XMRP = 1109.0000 IN. XO # 474.8100 IN. YO # 474.8100 IN. YO # 774.8100 IN. YO # 774.8100 IN. YO # 775.0007 IN. ZO # 775.000 IN. XO # 776.000 IN. XO # 775.000 IN. XO # 775.00 IN.	#EFERENCE DATA # REFERENCE DATA # 6590.0000 SQ.FT, XMRP = 1109.0000 IN. XO # 474.8100 IN. YO # 936.6800 IN. YO # 8575.0007 IN. ZMRP = 375.0007 IN. ZMRP = 6.000 DX = 10RB	#EFERENCE DATA #UDDER # .0000 STAB * .0000 IN. YO #UDDER # .0000 DX	#FEMENCE DATA ## 56000 50.FT. XMPP = 1109 0000 IN. XO ## 174.81000 IN. XO ## 174.8100 IN. XO ## 174.8100 IN. XO ## 174.8100 IN. XO ## 174.8100 IN. XO ## 10. XMPP = 1109.000 IN. XO ## 10. XMPP = 100.000 IN. XMPP = 100.000 ## 10. XMPP = 100.000 IN. XMPP = 100.000 ## 10. XMPP = 100.	#EFFERENCE DATA # 65690 050 50.07 T. XMPP = 1109.0000 IN. XO # 936.6800 IN. YMPP = 375.000 IN. YO # 936.6800 IN. YMPP = 375.000 IN. YO DZ = 45.000 DZ = 45.000 DZ = 45.000 DZ = 50.000 ### PERFORME DATA 1916 10	#FERENCE DATA #FEREN	

TABULATED SOURCE DATA - CA238

ARC 14-120(CA23B) 747/1 ATI 0351 (ORBITER DATA)

.55 75 J

(TNH038) (23

	000. 000. 000.										
DADAMP TO 10	0000.9		DCBL . 00004 . 00015 00023		DCBL 00006 .00007 00014		DCBL 00019 00002 00018		DCBL 00032 00016		DCBL 00024 00004 00014
	BETA RUDDER 10RB DY		DC YN 00005 . 000026 . 00007		DCYN .00009 .00029 .00013		DCYN .00013 .00032 .00036		DCYN .0000. 41000. 71000.		00001 00026 00003
		-5.00/ 5.00	DCY .00170 .00238 .00294 .00191	-5.00/ 5.00	DCY .00173 .00231 .00284	-5.00/ 5.00	0CY · 00208 · 00234 · 00298	5.00/ 5.00	DCY . 00175 . 00179 . 00274 . 00191	00.2 /00.9	DCY .00154 .00212 .00225
		INTERVAL .	DCLM .01237 .01224 .01475	INTERVAL = -	DCLM .00919 .00988 .001334	INTERVAL = -	DCLM .00516 .00777 .01053	INTERVAL = -5	FCLM .00471 .00569 .00782	INTERVAL = -5	DCLM . 00343 . 00636 . 00615
	20 O Z	GRADIENT 1	DCD -,00517 -,00917 -,01503	GRADIENT IN	000 - 00456 - 00822 - 01438	GRADIENT IN	DCD -,00413 -,00752 -,01269	GRADIENT IN	000 -,00276 -,00883 -,01500	GRADIENT IN	00175 00175 00352 00648
	00000 . N	* 3,33	DCL .00514 03850 08369	≈ 3.33	00526 .00526 .03481 .08228	≈ 3.32	DCL 00215 03194 07386	* 3.32	DCL .00582 02052 05927	3.3!	DCL .30301 02908 04768
	YMRP • 1109	RN/L	- 7.500 ALPHAO 6.000 8.000 10.000 GRADIENT	RN/L	# 10.000 ALPHAO 6.000 8.000 10.000 GRADIENT	RN/L	* 15.000 ALPHAO 6.000 8.000 10.000 GRADIENT	RN/L	* 30.000 ALPHAO 6.000 8.000 10.300 GRADIENT	RN/L	# 45.000 ALPHAO 6.000 8.000 10.000 GRADIENT
REFERENCE DATA	SPEF * 2630.0000 SQ.FT. LREF * 474.8100 IN. BREF * 935.6800 IN. SCALE *		20		Z 0		Z0 7		20		Z Q

DATE 23 MAR 76		REFERENCE DATA	SREF = 2690.0000 SO.FT. LREF = 474.8100 IN. BREF = 936.6800 IN. SCALE = .0125		. D2		REFERENCE DAT	SREF = 2690.0000 SQ.FT. LREF = 474.8100 IN. BREF = 936.6800 IN. SCALE = .0125		05		20		20
TABULATED		¥	XMRP YMRP ZMRP				Ā	KMRP YMRP ZMRP		,		•		#
TED SOURCE	ARC		= 1109.0000 = .0000 = 375.0000	RN/L	50.000 ALPHAO 6.000 8.000 10.000 GRADIENT	ARC		1109.	RN/L	3.500 ALPHA0 B.000 10.000 GRADIENT	RN/L	7,500 ALPHAO 8,000 10,000 GRAD!ENT	RN/L	10.000 ALFHAO 8.000 10.000 GRADIENT
DATA -	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	3.30	0CL .00170 01478 04308	14-120(CA238)		0000 IN. YO 0000 IN. YO IN. YO	= 3.35	DCL 05438 10282 04451	3,34	DCL 04489 09059 04552	₹ 3,34	DCL 64123 09414 64611
CA23B	38) 747/1 AT!			GRADIENT IN	DCD 00164 00325 00553	1747 (82)		000	GRADIENT INTERVAL	DCD 01020 01741 00579	GRADIENT IN	DCD -,00895 -,01553	GRADIENT II	DCD 00817 01527 00407
	0351			INTERVAL = -5	DCLM . 00321 . 00423 . 00595 00115	AT1 0251 (OF			ITERVAL * -5	DCLM .01298 .01666 00468	INTERVAL = -	DCLM .01019 .01396	INTERVAL = -	DCLM 84900. 84910
	(ORBITER DATA)			5.00/ 5.00	0CY .00112 .00170 .00265	(ORBLIER DATA)			5.00/ 5.00	00328 .00155 .00155	5.00/ 5.00	00290 .00290 .00270	5.00/ 5.00	DCY .00237 .00208
			BETA # RUDDER # 10RB # DY		00026 00008 00008 00005			BETA RUDDER 10RB DY		DCYN . 000041 . 00000		DCYN .00043 .00021		DCYN .00030 .00020
	(TNH038)	PARAMETRIC			DCBL 00044 00012 00015	(10H039)	PARAME TRIC			DCBL .00089 .00089		DCBL .00069 .00042	·	008L .00056 .00061 00009
PAGE	(23	C DATA	STAB # ELEVON # DX # MACH #			. 23	C DATA	STAB # ELEVON # DX # MACH #	•					
GE 567	OCT 75)		5.000 5.000 .000			OCT 75)		5.000 5.000 .000 .600						

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TABULATED SOURCE DATA - CA23B

ARC 14-120(CA23B) 747/1 ATI 02SI (ORBITER DATA)

5.000 **5**.000 .000 .000 STAB ELEVON DX MACH PARAMETRIC DATA BETA RUDDER 10RB DY GRADIENT INTERVAL . 375.0000 IN. XO 3.34 XMRP YMRP ZMRP REFERENCE DATA 2693.0330 SQ.FT. 474.9103 IN. 936.6830 IN. SREF LPEF BREF SCALE

J

(TNH039)

DCBL .00056 .00052 DCBL .00000 -.00015 DCBL .00006 .00009 DCBL .00022 .00002 DCYN .00009 .00007 DCYN .00023 .00021 DCYN .00009 .00008 . 00001 . 00001 . 00001 5.00 -5.00/ 5.00 -5.00/ 5.00 -5,007 5,00 0CY .00173 .00203 .00009 DCY .00137 .00180 DCY .00203 .00248 .00004 .00210 .00205 .00205 -5.00/ DCLM .00823 .01154 -.00357 DCLM .00638 .00986 -.00317 DCLM .00575 .00769 -.00359 DCLM .00535 .00694 -.00370 GRADIENT INTERVAL * GRADIENT INTERVAL = GRADIENT INTERVAL = DCD -.00747 -.01371 -.00234 DCD -.00503 -.00851 -.00066 DCD -.00362 -.00519 -.00225 DCD -.00341 -.00532 -.00265 DCL -.03908 -.09631 -.04711 DCL -.02994 -.05831 -.04785 DCL -.01664 -.04666 -.01470 -.04220 -.04612 3.33 3.33 3.33 RN/L . RN/L = 15.000 ALPHAO 8.000 10.000 CRADIENT 777 30.000 ALPHAO 8.000 10.000 GRADIENT 45.000 ALPHAO 8.000 10.000 GRADIENT 50.000 ALPHAO 8.000 10.000 GRADIENT н 20 20 20 70

569	1 75)		5.000 5.000 .000 .600										
PAGE	0) (17 OCT	DATA	STAB ELEVON EDX		·								
	(TNH0+0)	PARAMETR1C	0000		DCBL .00103 .00107 .00097 00014		OCBL .00063 .00085 .00087		DCBL .00055 .00072 .00070		0008L .00028 .00064 .00076		DCBL 00010 .00013 .00046
			BETA = RUDDER = 10RB = DY	0/ 5.00	DCYN .00038 .00030 .00037	00/ 5.00	0007N .00026 .00027 .00027	.00/ 5.00	DCYN .00037 .00027 .00027	00/ 5.00	. 000017 . 000018 . 000010	.00/ 5.00	DCYN .00006 .00008 .00008
	(ORBITER DATA)			VAL = -5.00/	.00226 .00210 .00231	ı,	007 .00238 .00168 .00154	i.	.00291 .00190 .00154	-5.	00154 .00109 .000088	# 12	. 00121 . 00138 . 00044
	A11 0251 (OR			GRADIENT INTERVAL	01175 .01175 .01167 .01166	GRADIENT INTERVAL	DCLM .00962 .00842 .00876 	GRADIENT INTERVAL	DCLM .00741 .00793 00812	GRADIENT INTERVAL	DCLM .00522 .00673 .00734	GRADIENI INTERVAL	DCLM .00330 .00533 .00555
38	147/1			3.33 GRA	CCD 00545 00930 01364	3.32 GR	000 - 00487 - 00831 - 01268 - 00507	3.32 GR	000 00462 00778 01194	3.32 GR	DCD 00414 00684 01053	3.33 GR	000 00269 00439 00709
OURCE DATA - CA238	14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	DCL 02039 06091 10117 04451	FN/L =	DCL 01524 05715 09689 04552	RN/L	DCL 01397 05200 09185	RN/L =	DCL 01824 04705 09360	PN/L =	001 01359 03376 05529 04755
S	ARC		# 1109. # 375.	0 /0 .	ALPHAO 4.000 6.000 8.000 GRADIENT	0 /0	ALPHAO 4.000 6.000 8.000 GRADIENI	0 /0	ALPHAO 4.000 6.000 8.000 GRADIENT	0 /0 .0	ALPHAO 4.000 6.000 8.000 GRADIENT	0, 0, 0	ALPHAO 4.000 6.000 8.000 GRADIENT
TABULATED		REFERENCE DATA	YMRP YMRP ZMRP	RUN NO	52 3.500 3.500 3.500	RUN NO	DZ 7.500 7.500 7.500	RUN NO	02 10.000 10.000 10.000	NON NO	02 15.000 15.000 15.000	PUN NO	20.000 30.000 30.000
1R 76		REFEREN	2690.0000 SQ. 474.8100 IN. 936.6900 IN.										
DATE 23 MAR 76			SREF # 6 LREF # 6 BREF # SCALE #					1 79	1				

DE POOR QUALITY

TABULATED SCURCE DATA - CA23B

ARC 14-120(CA238) 747/1 ATI 02SI (ORBITER DATA)

FAC. 170

	8.000 .000 .000 .000							5.000 .000 .000 .000				
DATA	STAB ELEVON DOX					-	DATA	STAB ELEVON BOX				
PARAMETR1			008 00008 .00016 .00027		DCBL 00005 .00024 .00026	TNHX	PARAME TR I C			DCBL . 00063 . 00024 00014		DCBL .00090 .00047
	BETA RUDDER 1 10RB 1 DY	00.2 .700	DCYN .00006 .00001	00.5.00	DCYN .00002- .00009 .00009			BETA BUDDER TORB TORB	00/ 5.00	DCYN 00035 00048	0/ 5.00	CCYN 00027 00062
			. 00108 . 00109 . 00132	н Г	. 00077 . 00069 . 00069 . 00064	RBITER DATA				. 00150 . 00199 . 00014	# 7	51000. . 00140 . 000191
		ADIENT INTE	DCLM .00261 .00416 .00528	ADIENT INTE	DCLM .00238 .00369 .00527				DIENT INTER	DCLM .01199 .01598 00468	DIENT INTER	DCLM .01037 .01401 00425
		3.33 GR	DCD 00159 00287 00458	3.32 GR	DCD 00131 00237 00375 00365	747/1			3.34 GR/	DCD 01037 02320 0679	3.34 GR/	DCD 00942 02060 00507
	<u> </u>	RN/L =	DCL 00796 02867 04340	PN/L *	DCL 00684 02764 03577 04612			żżż	RN/L	DCL 05575 09646 04451	RN/L =	DCL 05298 09099
	# # #	0. 0/ 0	AL PHAO 4.000 6.000 8.000 GRADIENT	0.00.0	AL PHAO 4.000 6.000 8.000 GRADIENT	ARC		at 18 16	0 0 0	ALPHAO 10.000 12.000 GRADIENI	0 00 0	AL PHAO 10.300 12.000 GRADIENT
	# 2690.0000 SQ.FT. #74.8100 IN. # 936.6800 IN.	א אטא	002 72.000 73.000 75.000	RUN N	07 20 · 000 50 · 000 50 · 000		REFERENCE DATA	# 2690.0000 SQ.FT. # 474.8100 IN. # 936.6800 IN.	RCN X	DZ 3.500 3.500	RUN NG	02 7.500 7.500
	PARAMETRIC PAIA	# 2690.0000 SO.FT. XMRP # 1109.0000 IN. XO BETA * .000 STAB # .474.8100 IN. YO RUDDER * .000 ELEVON #936.6800 IN. ZMRP # 375.0000 IN. ZO IORB * .000 DX * .000 MACH > # .000 MACH >	# 2690.0000 SQ.FT, XMRP # 1109.0000 IN. XO # 474.8100 IN. YMRP # 0000 STAB # 000 STAB # 000 STAB # 000 ELEVON # 000 ELEVON # 000 ELEVON # 000 ELEVON # 000 DX # 000 DX # 000 MACH * 000 MAC	# 2690.0000 SO.FT. XMRP # 1109.0000 IN. XO	# 2690.0000 SO.FT. XMRP # 1109.0000 IN. XO # 474.8100 IN. YMRP #0000 IN. YO # 936.6800 IN. YMRP #0000 IN. YO # 936.6800 IN. ZMRP #0000 IN. ZO # 936.6800 IN. ZMRP #000 IN.	# 2690.000 SO.FT. XMRP # 1109.0000 IN. XO	# 2690.0000 SO.FT. YMRP # 1109.0000 IN. XO # 2690.0000 SO.FT. YMRP # 1109.0000 IN. XO # 74, 8100 IN. YMRP # 1109.0000 IN. XO # 74, 8100 IN. YMRP # 1000 IN. XO # 74, 8100 IN. YMRP # 1000 IN. XO # 74, 8100 IN. YMRP # 1000 IN. XO # 74, 8100 IN. YMRP # 1000 IN. XO # 74, 8100 IN. YMRP # 1000 IN. XO # 75, 6100 IN.	# 2690-0000 SO.FT. YHRP # 1109-0000 IN. XO	# 1109.0000 IN. YAMPP 1109.0000 IN. YO 1109.000	## 2590 0000 50.FT. XHPP = 1109 0000 IN. XO ## 2500 01N	## Comparison	## CEROL COLOR SOLITION WHITE PARTY 1.109.000 IN. 70 1.09.000 IN. 70 IN. 7

38
TABULATED SOURCE DATA - CA238
ID SOURCE
TABULATE
75
DATE 23 MAR
2
DATE

1AR 75 T	TABULAT	TED SOUR	TABULATED SOURCE DATA - C	CA238						PAGE	: 571
		AR	RC 14-1201CA238)		17/1 AT	747/1 AT1 0251 (ORBITER DATA)	HER DATA		(TNHX10)	0) (17 OCT	. 75)
REFERENCE DATA	æ								PARAME TRIC	DATA	
2690.0000 50.FT. 474.8100 1N. 936.5900 IN.	X X X X X X X X X X X X X X X X X X X	= 1109 = 375	.0000 IN. .0000 IN.	200 200 200				BETA # RUDDER # 10RB # DY	8.000	STAB ELEVON BOX	8.000 .000 .000 .600
ፚ	RUN NO.	0 %	RN/L =	3,33	GRAD	GRADIENT INTERVAL	/AL = -5.00/	00/ 5.00			
02 10.000 10.000		ALPHAO 10.000 12.000 GRADIENT	DCL 05066 08665	DCD 00876 01867 00407		DCLM .00920 .01262 00400	. 00146 . 00197 . 00197	DCYN 00016 00071	DCBL .00119 .00073	,	
ă	PUN NO.	0 /0	RN/L .	3.35	GRAD	GRADIENT INTERVAL	VAL = -5.00/	00.5 /00			
02 15.000 15.000		AL PHAO 10.000 12.000 GRADIENT	DCL 04969 08298 04711	DCD 00791 01697 00234		DCLM .00785 .01092 00357	00075 .00075 .00135	DCYN 00035 00082	DCBL .00087 .00037		
ū	FUN NO.	0 /0	RN/L =	3.35	GRAD	GRADIENT INTERVAL	VAL = -5.00/	00/ 5.00			
DZ 30.000 30.000		ALPHAO 10.000 12.000 GRADIENT	DCL 03451 06216 04785	DCD 00435 01078 00066	435 078 056	DCLM .00581 .00807 00317	.00091 .00073 .00006	DCYN 00052 00096	DCBL .00069 .00037		
œ	RUN NO.	0 /0	RN/L =	3.35	GRAC	GRADIENT INTERVAL	VAL = -5.00/	00/ 2.00			
02 030.3 54.000		ALPHAO 10.000 12.000 GRADIENT	DCL 02022 04393 04649	DCD 00194 00561 00225	194 561 225	DCLM .00467 .00501 00359	00172 . 00159 . 00159	-,00048 -,00085 -,00085	DCBL .00064 00006		
tr.	RUN NO.	0 /0	RN/L =	3.35	GRAC	GRADIENT INTERVAL	VAL # -5.00/	00/ 2.00			
CZ 50.000 59.000		AL PHAO 10.000 12.000 0PAD1E11	DCL -,02212 -,0354 -,04512	DCD 00202 00415) 1202 1415 1265	DCLM .00389 .03542 00370	DCY .00187 .00503 .00004	DCYN 00047 00096	DCBL .00046 00004		

SREF "
LREF "
BREF "
SCALE "

ARC 14-120(CA238) 747/1 ATI 0251 (ORBITER DATA)

0. 75)		7.000 5.000 .000 .000												
<u></u>	C DATA	STAB = ELEVON = DX MACH =												
(TNHX13)	PARAME TR 1			DCBL .00114 .00146		DCBL .00098 .00136		DCBL .00087 .00122		DCBL .00080 .00107 00006		DCBL .00045 .00076		DCBL .000044 .00062
5		BETA RUDDER # 10RB # DY	00/ 5.00	000024 .000094 .00009	.00/ 5.00	DCYN .00019 .00007	00/ 5.00	DCYN .00008 .00003	.00/ 5.00	00001 - 00000 - 00006	.00/ 5.00	DCYN 00009 00003	.00. 5.00	DCYN 00003 00017
(ORBITER DATA)			RVAL = -5.	720 .00122 .0000.	- -	DCY .00037 00055	RVAL = -5.	DCY 00029 .00005	اء م	. 00055 00015 00015	i,	007 -, 00053 -, 00080 -, 00080	" "	.00007 .000037 .000037
AT1 0251 ((GRADIENT INTERVAL	OCLM .01275 .01608 00468	GRADIENT INTERVAL	DCLM .01020 .01324 .00425	GRADIENT INTERVAL	DCLM .00963 .01250	GRADIENT INTERVAL	DCLM .00807 .01094	GRADIENT INTERVAL	DCLM .00681 .00895 00317	GRADIENT INTERVAL	5CLM .00603 .00734 -,00359
38) 74771			3.34 GR	DCD 00887 01668	3.34 GR	00852 01536 01536	3.33 GR	000 00839 01493 00407	3,35 GR	00707 01339 00234	3.35 GR	00498 00934 00066	3.35 GR	000 00373 00628
14-120(CA238)		09.0000 IN. XO .0000 IN. YO 75.0000 IN. ZO	RN/L.	DCL 05901 10852 04451	RN/L =	DCL -,05802 -,10152 -,04552	RN.L ≠	DCL -, 05668 -, 19935 -, 04611	RN/L =	DCL 05432 09492 04711	RN/L	DCL 04048 07360 04785	RN/L =	DCL 03005 05745 04649
ARC		H H H	0. 0/ 0	ALPHAO 8.000 10.000 GRADIENT	0 00 0	ALPHAO 8,000 10,000 GRADIENT	0 0 0	ALPHAO 8.000 10.000 GRAD:ENT	0 /0 .0	ALPHAO 8.000 10.000 6RADIENT	0 20 0	ALPHAD 8.600 10.600 6RADIENT	0 0 0	ALPHAD B. DCG 10. GGG GRADIENT
	REFERENCE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO.	02 3.500 3.500	RUN NO	02 7.500 7.500	FOR NO	D2 10.000 10.000	ON NOW	02 15.003 15.000	NOW NOW	DZ 30.000 30.000	PUN NO	02 45.000 45.000
	REFER	2690.0000 474.8100 936.5800												
		SREF "LREF" BREF "SCALE"												

PAGE 573	(TNHX13) (17 OCT 75)	RIC DATA	STAB = 5.000 ELEVON = 5.000 DX = .000		C IO IO	(TNHX14) (17 OCT 75)	RIC DATA	0 STAB = 5.000 0 ELEVON = 5.000 0 DX = 10.000 0 MACH = .600		ማታታ		0		5. 5. 6.		Σ. Σ.
	₹L)	PARAMETR			DCBL .00060 .00075 00005	ŽΕ	PARAMETRIC	.000 .000 .000 .000		DCBL . 00139 . 00154 00014		DCBL .00108 .00141		DCBL .00093 .00136		008L .00103
	-		BETA = RUDDER = 10RB = DY	00/ 5.00	00003 - 00003 - 000001	•		BETA RUDDER BIORB BOY	00/ 5.00	00038 .00029 .000029	5.00/ 5.00	00027 .00027 .00015	.00/ 5.00	DCYN . 00012 . 00010	.00/ 5.00	DCYN .00013
	(ORBITER DATA)			INTERVAL = -5.00/	. 00001 . 00001 . 00054	(ORBITER DATA)			INTERVAL = -5.	0CY .00030 00053	INTERVAL = -5.	DCY 00000 00040	INTERVAL = -5.	00121 00099 00099	INTERVAL = -5.	DCY 00120 00167
	AT1 0251 (C			GRADIENT INTE	DCLM .005+3 .00667 00370	AT1 0251			GRADIENT INT	DCLM .00940 .01105	GPADIENT INT	00.M .00759 .00848	GRADIENT INT	DCLM .00538 .00761 00400	GRADIENT INT	# 100 # 100 # 100
CA23B	238) 747/1		000	3.35 G	DCD -,00280 -,00491 -,00255	238) 747/1		χο 7.0 2.0	3.34 6	DCD 00899 01682	3.34 0	000 00942 01539 00507	3.33	000 00821 01481 00407	3.35	DCD 00703
DATA -	C 14-120(CA23B)		1109.0000 IN. XO .0000 IN. YO 375.0000 IN. ZO	RN/L =	DCL 02713 05048 04612	C 14-120(CA23B)		.0000 .0000 .N.	RN/L =	0CL 06091 11599 04451	RN/L =	0CL 05585 10527 04553	O RN/L	0CL -, 05535 -, 10389 -, 04611	O RN/L =	00.05353
TABULATED SOURCE	ARC			NO. 0/ 0	ALPHAO 8.000 10.000 GRADIENT	ARC		XMRP = 1109 YMRP = ZMRP = 375	NO. 0/ 0	ALPHAO 8.000 10.000 GRAD1ENT	NO. 0/ 0	AL PHAO 8.000 10.000 GRAD I ENT	· o	AL PHAO B.300 10.000 GRADIENT	NO. 07	ALPHAO B.000
DATE 23 MAR 76 TABL		REFERENCE DATA	SPEF * 2690.0000 SQ.FT. XMRP LREF * 474.8100 IN. YMRP BREF * 936.6800 IN. ZMRP SCALE * .0:25	ON NOG	02 50.000 50.000		REFERENCE DATA	SREF = 2690.0000 50.FT. XM LREF = 474.8150 lN. YM BREF = 936.6850 lV. ZM SCALE = .0125	ON NOW	003.8 003.8 3.500	ON NOR	2.2 7.500 7.500	RUN NO	Z0 000:01	7.3 ù	20 000.21

TABULATED SOURCE DATA - CA23B

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(TNHX14) (17 OCT /5)	RIC DATA	10 STAB = 5.000 10 ELEVON = 5.000 10 DX = 10.000 10 MACH = .600		<u>თ</u> თ ი		- ω -		n ₽	HXI5) (17 OCT 75)	RIC DATA	T D E		t 10 7		T .O.—
Ţ	PARAMETRI			DCBL .00059 .00078		DCBL .00061 .00065		00059 .00059 .00071 00005	TAHALI	PARAMETR	000. 0000. 8		DCBL .00133 .00126		DCBL .00138 .05100
(A		BETA RUDDER I	.00/ 5.00	DCYN .00001 00010	.00/ 5.00	DCYN .00018 00019	.00/ 5.00	DCYN 00011 00019	2		BETA RUDDER 3 10RB B	.00/ 5.00	DCYN .00015 00003	00/ 5.00	DCYN .00007 00024 .00006
OPBITER DATA			INTERVAL = -5	DCY 00123 00072	INTERVAL = -5	DCY 00026 00052	INTERVAL = -5.	DCY 00152 00054 .00004	(ORBITER DATA)			INTERVAL = -5.	DCY -,00080 .00149	ا اگ	0003 .00003 .00131 .00012
AT1 0251			GRADIENT INT	DCLM .00452 .00574 00317	GRADIENT INT	DCLM .00415 .00505 00359	GRADIENT INT	DCLM . 00458 . 00495 00370	AT1 0251 ((GRADIENT INTE	DCLM .00831 .01207 00468	GRADIENT INTERVAL	DC! M . 00772 . 01082 00425
238) 747/1		000 XX0 XX0	3.35 6	CCD 00494 00888 00868	3.35 6	0CD 00391 00556 00255	3.35 6	DCD 00320 00522 00265	1747 (85			3.34 GF	DCD 01387 02678 00579	3.34 GR	000 01118 02369 05007
C 14-120(CA238)		 00000 00000 00000	RN/L =	DCL 03860 07191 04785	RN/L *	DCL 02952 05116 04649	RN/L =	DCL 02251 04945 04612	14-120(CA23B)		0000 IN. YO 0000 IN. YO 0000 IN. ZO	RN/L =	DCL 06896 11503 04451	RN/L *	0CL 06159 10429 04552
ARC		375.	NO. 0/ 0	ALPHAO 8.000 10.000 GRADIENT	0 /0 .CN	AL PHAO 8.000 10.000 GRADIENT	NO. 0/ 0	AL PHAO 8.000 10.000 GRADIENT	ARC		1109. 375.	0, 0, 0	ALPH40 10.000 12.000 GR4D1ENT	0 0 0	ALPHAO 10.000 12.000 GRADIENT
	REFERENCE DATA	SPEF = 2690.3000 SQ.FT. XMRP LPEF = 474.8100 IN. YMRP BREF = 936.5800 IN. ZMRP SCALE = .3:25	RUN 1	50 30.000 30.000	RUN N	02 45.000 45.000	Z 70K	00 50.000 50.000		REFERENCE DATA	SREF = 2591.0000 SO.FT. XMRP LREF = 474.8100 IN. YMRP BREF = 936.6900 IN. ZMRP SCALE * .0125	RUN NO	02 3.500 3.500	RUN NO	02 7.500 7.500

DATE 23 MAR 76		ac	SREF * 2690.00 LREF * 474.81 BREF * 936.66 SCALE * .01		ΩR	IGI	nali PA Oor Qu	AGI					
‡.		REFERENCE DATA	300 SQ IN.	35	02 10.003 10.003	RUN	02 15.000 15.000	<u>ي</u> 2	02 30.003 30.000	No.	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	N N	02 50,000 50.000
BULATED SOURCE	ARC		0000°5011 = de⊼Z 0000° = de⊼Z	NO. 0/ 0	AL PHAO 10.000 12.000 GRADIENT	NO. 0/0	ALPHAO 10.000 12.000 GRADIENT	NO. 0/ 0	ALPHAO 10.000 12.000 GRADIENT	NO. 0/ 0	AL PHAO 10.000 12.000 GRADIENT	1 NO. 0/ 0	ALPHAO 10.000 12.000 GAADIENI
SOURCE DATA - CA238	14-120(CA23B)		.109.0000 IN. YO 375.0000 IN. ZO	RN/L =	DCL 05639 09661 04611	RN/L ≈	DCL 05254 08731 04711	RN/L =	DCL 03332 06374 04/85	RN/L =	DCL 02608 04649 04649	RN/L =	DCt 02004 03890 04612
38	3B) 747/1 ATI			3.33 GRA	000 00946 02157 00407	3.35 GR/	DCD 00828 01873 00234	3.35 GR/	000 00418 01162 00066	3.35 GR/	000 00303 00679 00225	3.35 GR	DCD 00208 00513
				GRADIENT INTERVAL	DCLM .00721 .00998 00400	GRADIENT INTERVAL	DCLM .00609 .00853	GRADIENT INTERVAL	DCLM .00472 .00643 00317	GRADIENT INTERVAL	DCLM .00389 .00515	GRADIENT INTERVAL	001H .00380 .00486 00370
	0251 (ORBITER DATA)			3VAL = -5.00/	00064 .000132 .00011	3VAL = -5.00/	007 .00025 .00067 .00009	u	00079 .00079 .00105	18	0004 .00061 .00190 .00004	tı	00098 .00098 .00159
			BETA RUDDER RIORB ROY	00/ 5.00	00004 .00004 000035	00/ 5.00	00013 00067 00067	-5.00/ 5.00	DCYN 00024 00075	-5.00/ 5.00	DCYN 00043 00065	-5.00/ 5.00	DCYN 00041 00081
	(TNHX15)	PARAMETRIC	8 .000 .000		DCBL .00139 .00078 00009		DCBL .00115 .00091 00006		DCBL .00096 .00076		DCBL .00049 .00034		DCBL .00063 .00044
PAGE	15) (17 OCT	DATA	STAB ELEVON ** DX MACH . *										
'n.	7 7		សលក្										

5.000 10.000 .600

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SREF = LREF = BREF = SCALE =

TABULATED SOURCE DATA - CA23B

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1.5.1		5.000 5.000 600 600										
6) (17 oct	DATA	STAB ELEVON BOX										
(TNHX16)	PARAMETR 1C			DCBL .00115 .00141		DCBL .00093 .00117 00011		DCBL .00085 .00114		DCBL .00075 .00093		DCBL .00028 .00078 00002
		BETA ** RUDDER ** IORB **	10/ 5.00	DCYN .00032 .00020	10/ 5.00	DCYN .00038 .00026	00.5.00	DCYN .00022 .00014	10/ 5.00	DCYN .00016 .00004	10/ 5.00	DCYN .00003 00003 00002
BITER DATA			TVAL = -5.00/	. 00114 . 00087 . 00014	NAL = -5.00/	. 00129 . 00119 . 00012	TVAL = -5.007	00052 .00091 .00091	TVAL = -5.00/	DCY .00033 .00102	NAL = -5.00/	DCY .00039 .00070
ATI 02SI (ORBITER			GRADIENT INTERVAL .	00471 .00516 .00516	GRADIENT INTERVAL =	22,400. 62500. 62500.	GRADIENI INTERVAL =	DCLM .00158 .00197	GRADIENT INTERVAL =	DCLM .00137 .00191 00357	GRADIENT INTERVAL	DCLM .00190 .00249
38) 747/1 AT1			3.34 GR	000 00634 01393 00679	3.34 GR	000 00622 01320 00507	3.33 GR	000 -,00524 -,01282 -,00407	3.35 GR	DCD 60599 01199	3,35 GR	000 -,00459 -,008+1 -,00066
RC 14-120(CA23B)		9.0000 IN. XO .0000 IN. YO 75.0000 IN. ZO	RN/L	DCL 06113 11479 04451	RN/L =	DCL 05638 10634 04552	RN/L =	DCL -,05640 -,10500 -,04611	RN/L =	DCL 05120 09568 04711	RN/L =	DCL -,03825 -,07393 -,04785
ARC		<u> </u>	0 /0 .	ALPHAO 8.000 10.000 GRADIENT	0 /0 .	AL PHAO 8.000 10.000 GRADIENT	0 /0 .	ALPHAO 8.900 10.000 GRADIENT	0 0 .	4L PHAO 8.000 10.000 GRADIENT	0 /0 .	ALPHAO 8.000 10.000 GRADIENT
	E DATA	FT. XMRP YMRP ZMRP	RUN NO.	3.500 3.500	RUN NO	02 7.500 7.500	FON NO	02 10.000 10.000	RUN NO	02 15.000 15.000	RUN NO	000 30.000 30.000
	REFERENCE DATA	2690.0000 SO.FT 474.8100 IN. 932.6800 IN.										

DCBL .00041 .00038

DCYN .00003 -.00015

DCY .00053 .00123

DCLM .00259 .00302 -.00359

DCD -.00346 -.00564 -.00225

DCL -. 02714 -. 05439 -. 04649

ALPHAO B.000 10.000 SPADIENT

02 45.000 45.000

3.35 GRADIENT INTERVAL = -5.007 5.00

RN/L ≈

0 /0

P.CN NO.

DATE 23 MAR 76 TREFERENCE DATA	TABULATED DATA	ATED SOURCE ARC	DATA - C	A238	AT1 0251 (OR	(ORBITER DATA)		(TNHX16) (17 DATA	PAGE 577 0CT 75)
SREF = 2690.0000 SQ.F1 LREF = 474.8100 IN. BREF = 936.6800 IN. SCALE = .0125	T. XMRP YMRP ZMRP	* 1109. * 375.	00000 IN. XO 00000 IN. XO 00000 IN. XO				BETA RUDDER 10RB DY	0000.9	STAB ELEVON BOX	5.000 8.000 80.000
• • • • • • • • • • • • • • • • • • • •	FUN NO.	ALPHAO 8.000 10.000 GRADIENT	RN/L = DCL - 02526 - 05160 - 04612	3.35 G DCD 00300 00494	GRADIENT INTERVAL DCLM . .00266 .00298	5. .00078 .00145	00/ 5.00 DCYN .00009 .00016	00BL .00043 .00037	·	
		ARC	14-120:0	4238) 747/1	AT1 0251	(ORBIJER DATA)	•	(TINHX17)	(17	OCT 75)
REFERENCE DATA	DATA							PARAME TRI	C DATA	
SREF = 2690.0000 SQ.F' LPEF = 474.8100 IN. BREF = 936.6800 IN. SCALE =0125	T. XMRP YMRP ZMRP	1109.	0000 IN. YO 0000 IN. YO				BETA # RUDDER # 10RB # DY	0000.8	STAB ELEVON # DX MACH	5.000 5.000 80.000
	RUN NO	0 /0	RN/L	3.34 6	GRADIENT INTERVAL	* .5.	00/ 5.00			
	3.500 3.500	ALPHAO 10.000 12.000 GRADIENT	00L 07194 11485 04451	DCD 01240 02458 00679	DCLM .00609 .00788	,00009 ,000325 ,000325	DCYN .00004 00012	DCBL .00072 .00103		
	RUN NO	0 /0	₽ 1/t/G	3,34 6	GRADIENT INTERVAL	'n,	00/ 5.00			
	02 7.500 7.500	ALPHAO 10.000 12.000 GRADIENT	DCL -,06455 -,10756 -,04552	000 00980 02295 00507	00495 64900. 64900.	.00109 .000238 .00038	DCYN 00000 00033	DCBL .00092 .00079 00011		
	RUN NO	0 00 0	RN/L #	3.33 6	GRADIENT INTERVAL	, .	00/ 2.00			
	DZ 10.000 10.000	AL PHAO 10.000 12.000 GRADIENT	DCL - , 05907 - , 10845 - , 0-611	.000 00811 02173 0407	00395 .00558 .00558	007 .00186 .00170	DCYN .00000. 00048	CCBL . 00109 . 00050		
	RUN NO	0 / 0	H	3.35 6	GRADIENT INTERVAL	.5.	00/ 2.00			
	02 15.000 15.000	AL PHAD 10.000 12.000 08401547	0000 0000 0000 0000	000 00772 02025 00234	DCI.M .00293 .00436	00Y .00312 .00168	DCYN 00009 00059	DCBL . 00072 . 00048		

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0C i 75 1		8.000 .000 .000 .600							(57 1)		5.000 .000 .000 .000				
(17	DATA	STAB ELEVON : DX MACH :							7) (17 OCT	DATA	STAB E ELEVON E DX MACH E				
× .	PARAMETRIC	000. 8.000.		DCBL .00070 .00026 00002		DCBL .00054 00009		DCBL .00043 00008 00005	(TNHX27)	PARAME TRIC			DCBL .00023 .00047 00038		DCBL .00045 .00033 00025
		BETA RUDDER - TORB -	.00/ 5.00	00080 00080 000080	00/ 5.00	00082 00082 00082	00/ 5.00	00034 00078 00078			BETA # RUDDER # !ORB # DY	.00/ 5.00	DCYN .00121 00068 00011	.00/ 5.00	00000 - 000000 - 000000 - 000000 - 000000
(ORBITER DATA)			* 5-	700 .00213 .0000.	* -5.	007 .00145 .00261	. # -5.	00.7 .00184 .00311	(ORBITER DATA)			i,	0CY .00335 .00239 -,00023	1.	DCY .00237 .00283 00015
AT1 0251 (0			GRADIENT INTERVAL	DCLM .00233 .00381	GRADIENT INTERVAL	DCLM .00257 .00347 .00359	GRADIENT INTERVAL	DCLM .00242 .00323 00370	ATI 0351 (0			GRADIENT INTERVAL	DCLM .01470 .02238	GRADIENT INTERVAL	DCI.M .01227 .01866 00648
38) 747/1			3.35 GR	00486 01311 0156	3.35 GR	000 00341 00754 00225	3.35 GR	DCD 00301 00557	1747/1			3.31 GR	00721 02110 0547	3.30 GR	0CD 00713 02045
14-120(CA23B		0000 IN. YO	RN/L =	DCL 04240 07051 04785	RN/L .	DCL 02781 05007 04649	PN/L =	DCL 02792 04699	14-120(CA238		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L #	CCL 04485 09157 03831	RN/L =	DCL 04611 08975 04155
ARC		1109	0 0 00	ALPHAO 10.000 12.000 GRADIENT	0. 0/ 0	ALPHAO 10.000 12.000 6RAD:ENT	0 0 0	ALPHAO 10.000 12.000 GRADIENT	AAC		1109 375	0, 0, 0	ALPHAO 10.000 12.000 GRADIENT	0. 3/0	ALPHAO 10.000 12.000 5RADIEHT
4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 -	אבי באבואכב טאוא	SREF = 2690.0000 SO.FT, XMRP LREF = 474.8100 IN. YMRP BREF = 936.6800 IN. ZMRP SCALE = .0125	RUN NO.	02 30.000 30.000	AUN NO	DZ 45.000 45.000	ACN NO	00 20.000 50.000		REFERENCE DATA	SREF = 2690.0000 50.FT. XMRP LREF = 474.8100 IN. YMRP BREF = 936.6800 IN. ZMRP SCALE = .0125	RUN NO	02 3.500 3.500	NON NO	02 7.500 7.500

579	1 22 1		5.000							
PAGE	7) (17 OCT 75	DATA	STAB ELEVON BOX							
	(TNHX27)	PARAMETRIC DATA	8.000 .000 .000		DCBL .00072 .00063		DCBL .00027 .00017 00004		DCBL .00024 .00011	
			BETA RUDDER RIORB CY	-5.00/ 5.00	00000. .00000.	-5.00/ 5.00	DCYN .00007 00001	-5.00/ 5.00	DCYN .00006 00026 00003	5.00
	BITER DATA)				00132 .00132 .00294		007 .00227 .00441 00002		00198 .00198 .00351	4VAL = -5.00/
	747/1 ATI 03SI (ORBITER DATA)			GRADIENT INTERVAL =	DCLM .01027 .01570 30589	GRADIENT INTERVAL .	DCLM .00924 .01440 00488	GRADIENT INTERVAL =	DCLM .00603 .01148 00394	GRADIENT INTERVAL
38				3.30 GRA	DCD 00692 02011 00302	3.30 GR/	DCD 00743 01886 00146	3.29 GR/	000 00454 01352	3.30 GR
DATA - CAE	ARC 14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	DCL 04655 08741 04310	RN/L =	DCL 04708 08172 04577	RN/L =	DCL 03599 06044 04833	RN/L *
TABULATED SOURCE DATA - CA23B	ARC		0000 0000 0000 375.0000	10. 0/0	ALPHAO 10.000 12.000 GRADIENT	Ø. 0/0	ALPHAO 10.000 12.000 GRADIENT	ð. 0/0	AL PHAO 10.000 12.000 GRADIENT	ð. 0 '0
TABU		REFERENCE DATA	N. YMRP N. YMRP N. ZMRP	RUN NO.	02 10.000 10.000	RUN NO.	02 15.000 15.000	FLUN NO.	30.000 30.000	RUN NO.
23 MAR 76		REFERE	2690,0000 SQ.FT 474,8100 IN. 936,6800 IN.							
63										

DCBL -.00018 .00037 -.00006

. 00006 . 00008 . 00000

DCY .00214 .00255 .00028

DCLM .00590 .01047

DCD -.00261 -.00970 -.00141

DCL -.02090 -.04167 -.04582

ALPHAO 10.000 12.000 6RADIENT

DZ 45.000 45.000

DCBL -.00014 .00052 -.00009

3.30 GRADIENT INTERVAL = -5.007 5.00

DCD DCLM DCY DCY C.00236 .00495 .00231 .00007
-.00843 .01024 .06262 .00033
-.00179 -.00519 .06032 .00003

RN/L # DCL -.01949 -.03651 -.04517

ALPHAO 10.000 12.000 GRADIENT

50.000 50.000 50.000

0 /0

RUN NO.

DCLM .00495 .01024

DATE 23

SREF LREF BREF SCALE

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CT 75 3		5.000 .000 10.000												
28) (17 OCT	C DATA	STAB FLEVON BOX												
CTNHX28	PARAMETRIC	60.000 60.0000		DCBL .00045 .00051		DCBL .00018 .00033		DCBL .00011 .00038		008L 00006 .00022		DCBL 00020 .00005		DCBL 00037 .00026 00006
•		BETA BRUDDER BIORB BY	.007 5.00	DCYN .00062 .00103	00/ 5.00	DCYN . 00059 . 00084 00009	.00/ 5.00	DCYN .00037 .00065 00009	00/ 2.00	DCYN .00039 .00055	00/ 5.00	DCYN . 00024 . 00030 00003	.00/ 5.00	DCYN .00008 .00025
(ORBITER DATA)			č	DCY .00275 .00283	.5.	007 .00261 .00240 00015	יו ני	00194 .00192 00010	". 'Ů	DCY .00193 .00153	-5.	.00150 .00170 .00170	5	DCY .00082 .00153
1320			GRADIENT INTERVAL	DCLM .00917 .00935 00748	GRADIENT INTERVAL	DCLM .00524 .00584 00648	GRADIENT INTERVAL	DCLM .00360 .00454 00589	GRADIENT INTERVAL	DCLM .00181 .00286 00488	GRADIENT INTERVAL	DCLM .00161 .00364 00394	GRADIENT INTERVAL	DCLM .00276 .00336 00493
3B) 747/1 AT1			3.31 GR/	0CD 00731 01249 00547	3.30 GR/	000 -,00679 -,01194 -,00392	3.30 GR/	DCD 00672 01149 00302	3.30 GR/	000 -,00613 -,01039 -,01039	3.29 GR/	.000058 00058 00005	3.30 GR	00311 00311 00420 00141
ARC 14-120(CA23B)		0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L =	DCL -,05591 -,10299 -,03891	RN/L =	DCL 05119 09406 04155	RN/L =	DCL 04934 63185 04310	RN/L =	DCL 04749 08837 04577	RN.1 ₽	DCL 03913 06512 04833	RN/L =	DCL 02768 04800 04582
ARC		= 1109. = 375.	0 00 00	ALPHAO B.000 10.000 GRADIENT	0 /0 .0	ALPHAO B.000 10.000 GRADIENT	0 00 0	ALPHAO 8.000 10.000 GRADIENT	0 00 0	ALPHAO 8.000 10.000 GRADIENT	0 /0 0	ALPHAO 8.000 10.000 GRAD:ENT	0 00 0	ALPHAO 8.000 10.000 CRADIENT
	CE DATA	SO.FT. XMRP IN. YMRP IN. ZMRP	RUN NO	02 3.500 3.500	RUN NO	02 7.500 7.500	FON NO	DZ 10.000 10.000	RUN NO	05 15.000 15.000	RUN NO	02 30.000 30.000	RUN NO	52 45.000 45.000
	REFERENCE DAT	2690.0000 SQ.1 474.8100 IN. 936.6800 IN.												

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ARC 14-120(CA238) 747/1 ATI 03SI (ORBIFFR DATA

OCT 75)		5.000	000.01			•				100			5.000 20.000	2				
(53)	č	STAB	ELEVON DX MACH									DATA	STAB ELEVON BOX					
(TNHX29	0 + 0 + 0 + 0	000.	900. 9.000.		008L .00026 .00018		DCBL 00005 .00052		DCBL .00033 .00058	(OF YHNI)		PARAME TRIC	000.8		DCBL .00056 .00052		DCBL .00055 .00011 00025	
7		BETA =	TORB DY	.007 5.00	DCYN .00012 00003	.00/ 5.00	00012 .00012 .00023	.00/ 5.00	DCYN . 00026 . 00058				BETA ** RUDDER ** IORB ** DY	.00/ 5.00	DCYN . 00124 . 00079 00011	.00/ 5.00	\ <u>\</u>	
ORBITER DATA				ដ	DCY .00146 .00286	.5	0CY .00159 .00210	#.	00153 .00153 .00181	(ORBITER DATA)				* 	0CY .00209 .00230 00023		.00198 .0018 .00218 0001-	
AT1 03S1 ((GRADIENT INTERVAL	DCLM .00412 .00844 00394	GRADIENT INTERVAL	DCLM .00409 .00859	GRADIENT INTERVAL	DCLM .00394 .00861	AT1 0351 (0)				GRADIENT INTERVAL	DCLM .00649 .00954 00748	GRADIENT INTERVAL	DCLM .00385 .00811 00648	
747/1		0.0	0	3.29 GF	00411 01407 00005	3.30 GR	DCD -, C0230 -, 00349 -, 00141	3.30 GR	DCD 00186 00843 00179	1/247				3.31 GRA	DCD 01003 02468 0547	3.30 GRA	DCD 00806 02347 00332	
C 14-120(CA23B)		1109.0000 IN. XO	ż	RN/L	DCL 03396 06420 04833	RN/L =	DCL 02266 04496 04582	RN/L =	DCL -,01786 -,94044 -,04517	14-120(CA23B			0000 IN. XO 0000 IN. YO 0000 IN. ZO	RIVE .	DCL 06107 11544 03691	RN/L =	DCL 05525 10763 04155	
ARC				0, 0, 0	ALPHAO 10.000 12.000 GRADIENT	NO. 0/ 0	ALPHAO 10.000 12.000 GRADIENT	0 0 0	ALPHAO 10.000 12.000 GRADIENT	ARC			# 1109. # 375.	0 00 00	ALPHAO 10.000 12.030 GPADIENT	0 /0 .	ALPHAO 10.000 12.000 GRAD:ENT	
	PEFERENCE DATA	50.FT.	<u>z</u>	RUN NO	02 30.000 30.000	N NUR	02 45.000 45.000	N NO	02 50.000 50.000		REFERENCE DATA	i	2 Z Z	RUN NO	02 3.500 3.500	RUN NO	DZ 7.500 7.500	
		SREF = 2690.0000 LREF = 474.8100 BREF = 625 5000	1 H								•	, ,						

DATE 23 MAR 76	TABULATED					٠				
		ARC	14-120(CA23B)	38) 747/1 ATI	ATI 0351 (ORBITER	RBITER DATA)	•	(TNHX30)	\$0) (17 OCT	CT 75)
REFE	REFERENCE DATA							PARAMETRIC	DATA	
SREF = 2690.0000 LREF = 474.8100 BREF = 936.5800 SCALE = .0125	SO.FT. XMRP IN. YMRP IN. ZMRP	1109,0000	0000 IN. XO	200			BETA RUDDER I ORB	000 000 000 000 000	STAB ELEVON BOX	5.000 .000 20.000
	RUN NO.	0 / 0	PN/L *	3.30 GR	GRADIENT INTERVAL	RVAL = -5.03/	00/5 /00			
	DZ 10.000 10.000	ALPHAO 10.000 12.000 GRADIENT	DCL 04990 10169 04310	DCD 00662 02254 00302	DCLM .00222 .00709	.00197 .00209 00010	00080 .00033 .00033	DCBL .00048 00020		
	RUN NO.	0 0 .	RK/L ≖	3.30 GR	GRADIENT INTERVAL	RVAL = -5.00/	00/ 5.00			
DAG	02 15.000 15.000	ALPHAO 10.000 12.000 GRADIENT	DCL 05118 03612 04577	000 00659 02157 00146	DCLM .00070 .00618	007 .00155 .00207 00002	DCYN .00065 .00023	DCBL .00061 00033		
e I	ACA NO	0 0 0	BN/L =	3.29 GR	GRADIENT INTERVAL	RVAL = -5.00/	00/ 5.00			
S	02 30.000 30.000	ALPHAO 10.000 12.000 GRADIENT	DC. 03950 057-53 04833	DCD 00392 01511 000.	DCLM .00161 .00506	007 .00127 .00241	0CYN .00030 00062	DCBL .00030 .00022		
	RUN NO.	0 /0	BN/L	3.30 GR	GRADIENT INTERVAL	RVAL = -5.00,	00, 5.00			
	02 45,000 45,000	ALPHAO 10.000 12.000 GRADIENT		DCD 00246 01212 00141	DCLM .00289 .00722	DCY . 30105 . 30170 . 00028	00000 .	DCBL .00014 .00036		
	RUN NO	0 00 0	R::/L =	3.30 GR	GRADIENT INTERVAL	RVAL = -5.00/	00/ 2.90			
	02 50.000 50.000	ALPHAO 10.000 12.000 GRADIENT	000 1000 1000 1000 1000 1000 1000 1000	DCD 00211 00947	DCLM .00321 .00745	00135 .00168 .00168	DCYN .00023 .00044	OCBL .00010 .00049		

ORIGINAL PAGE IS

TABULATED SOURCE DATA - CA238

ARC 14-120(CA23B) 747/1 ATI 0351 (ORBITER DATA)

(TNHX31) (17 OCT 7F)

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(1) (17 OCT 7F)	DATA		a												
(TNHX31)	FARAMETRIC	000.9	000.	ā	.00058 .00053 00038		0CBL .00043 .00044 00025		DCBL .00026 .00041		DCBL .00033 .00024		DCBL 00013 .00044		DCBL 00019 .00005
â		BETA RUDDER BETO BETO BETO BETO BETO BETO BETO BETO	>	00.5 /00.	.00071	.00/ 5.00	DCYN .00060 .00085	00/ 5.00	DCYN .00052 .00070	.00/ 5.00	8000	.00/ 5.00	DCYN . 00029 . 00024	00/ 5.00	. 00019
USSI (ORBITER DATA)			•	ი • ბ	.00165	il R	007 .00162 .00148	ئر	.00160 .00143	". r.	00.00 00.51 00.00 90.00		.00148 .00058 .00058	RVAL * -5.00/	DCY . 00054 . 00125
-			GRADIENT INTERNA	DCLM	.00042 00024 00748	GRADIENT INTERVAL	DCLM 00109 00092	GRADIENT INTERVAL	DCLM 00197 00143	GRADIENT INTERVAL	DCLM 00250 00169	GRADIENT INTERVAL	DCLM 00038 .00076 00394	GRADIENT INTERVAL	OCLM .00164 .00235 00493
1//4//		0 0 0 Z	M M	٥	-,00 606 -,01129 -,00547	3.30 6	DCD 00550 01055	3.30 GF	DCD 00538 01004 00302	3.30 GR	DCD 00493 00946 00146	3.29 GR	DCD 00335 00663	3.30 GR	DCD 00271 00434 00141
		00000 IN.	RN/L	DCL	-, 05396 -, 09749 -, 03891	RN/L *	DCL 04975 09256 04155	RN/L #	DCL 04600 08892 04310	RNIL	DCL 04572 08462 04577	R:1/L =	DCL 03538 06537 04833	RN/L =	DCL 02315 04623 04582
		1109		AL PHAO	8.000 10.000 GRADIENT	NO. 0/ 0	ALPHAO 8.000 10.000 GRAD1ENT	0, 0	ALPHAO 8.000 10.000 GRADIENT	0. 0/0	41 PHAO 8 - 000 10 - 000 GRADIENT	0 /0 :	40 PH40 8.000 10.000 GP4D:ENT	0 / 0	ALPHAO 8.000 10.000 GRADIENT
	METEMENCE DATA	2690.0000 SO.FT. XMRP 474.8100 IN. YMRP 936.6800 IN. ZMRP	ON NOR	02	3.500 8.500 8.500	RUN N	02 7.500 7.500	א איסת	02 10.000 10.000	ON NO	02 15.000 15.009	RUN NO	02 30.000 30.000	RUN NO	02 45.000 45.000
		SREF = 2690. LREF = 474. BREF = 936.(

585	. 75		5.000 20.000 .600			1 75)		5.000 .000 .000 .600								
PAGE	1) (17 007	DATA	STAB E ELEVON B DX MACH B			4) (17 OCT	DATA	STAB # ELEVON # DX # MACH #								
	CTNHX3	PARAMETR1C			DCBL 00032 .00005	(TNHX34)	PARAME TRIC	6.000 6.000 000		DCBL .00015 .00021		DCBL .00003 .00014 00025		OCBL 00001 .00004 00017		DCBL 00018 .00011 00004
			BETA # RUDDER # !ORB # DY #	00.5.00	DCYN . 00016 . 00007			BETA RUDDER RIDRB RDY	.00/ 5.00	0CYN .00019 .00043	007 2.00	DCYN 00007 .00025 00009	.007 5.00	DCYN -,00005 -,00006 -,00009	00/ 5.00	2007N - 20016 - 500016
	(ORBITER DATA)			/AL5.00/	. 00017 . 00017 . 00032	(ORBITER DATA)			(DCY .00366 .00360 00023	ئ ئ	00310 .00310 .00289 00015	۳. اگ	DCY .00393 .00275	ů, Ř	00.4 .00.303 .00.003 .00.003
	0351			GRADIENT INTERVAL	DCLM .00220 .00255 00519	11 0351			GRADIENT INTERVAL	DCLM .01703 .01886 00748	GRADIENT INTERVAL	DCLM .01242 .01451 00648	GRADIENT INTERVAL	DCLM .01014 .01225 00589	GRADIENT INTERVAL	DCI.M .00703 .01020
æ	1) 747/1 ATI			3.30 GRA	DCD 00248 00386 00179	A 1/747 (3.31 GRA	000 -,00882 -,01458 -,00547	3.30 GRA	DCD 00815 01351 00392	3.30 GRA	DCD 00780 01294 00302	3.30 GR/	000 00726 01174
DATA - CA23B	14-120(CA23B)		00000 IN. YO	RN/L =	DCL 01931 04289 04517	14-120(CA238		.0000 IN. YO .0000 IN. YO .0000 IN. ZO	RN/L =	CCL 05438 10108 03891	BN/1 =	DCL 05159 09388 04155	RN/L =	DCL 05308 09055 043'0	PN/L *	000 050 0650 0457
TED SOURCE	ARC		0.0011 = 0.00.00.00.00.00.00.00.00.00.00.00.00.0	0 %	ALPHAU B.000 10.000 GRADIENT	ARC		# 1109 # 375	0 /0	ALPHAD B.CCC 10.CCC GRADIENT		AL PHAO 8.000 10.000 GRADIENT	0 %	ALPEAC 8.000 10.000 GRADIENT	0, 0,	ALPHAO 8-000 10-000 00-000 00000
DATE 23 MAR 76 TABULATED		REFERENCE DATA	SREF = 2690.0000 SQ.FT. XMRP LREF = 474.8100 IN. YMRP BREF = 936.6800 IN. ZMRP SCALE = .01.25	RUN NO.	50.000 50.000 50.000		REFERENCE DATA	SREF = 2690.0000 SO.FT. XMRP LREF = 474.8100 IN. YMRP BREF = 936.6800 IN. ZMRP SCALE = .0125	RUN NO	DZ 3.500 3.500	RUN NO	02 7.500 7.500	RUN NO	DZ 10.000 10.000	RUN NO	00 15.000 15.000

TABULATED SOURCE DATA - CA23B

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

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1.75		5.000 .000 .000 .000							175)		5.000 .000 .000				
÷ ;	CDATA	STAB ELEVON # DX MACH #							(0) (17 OCT	DATA	STAB = ELEVON = DX MACH =				
4EXHVI)	PARAMETRIC			DCBL 00046 00008		DCBL 00072 .00004		DCBL 00071 00019 00009	(TNHY 10)	PARAMETRIC			DCBL .00085 .00065		DCBL .00093 .00053
_		BETA = RUDDER = 10RB = DY	.00/ 5.00	DCYN 00000 00024 000034	00/ 5.00	DCYN 00026 00025	00/ 5.00	DCYN -,00018 -,00013			BETA RUDDER ILORB ILORB	.00/ 5.00	DCYN -, 00025 -, 00042	00/ 5.00	DCYN 00026 00061
CORBITER CATA			ا -5	0CY .00302 .00226	AL = -5.	92000. 00199. 00194.	AL = -5.	DCY .00166 .00228 .00032	(ORBITER DATA)			*,	00158 .00158 .00229	ERVAL = -5.0	DCY .00142 .00136
AT1 0351 (C			GRADIENT INTERVAL	DCLM .00541 .00847	GRADIENT INTERV	DCLM .00639 .00754 00493	GRADIENT INTERV	DCLM .00662 .00749 00519	AT1 0251 (0			GRADIENT INTERVAL	DCLM .01194 .01589 00468	GRADIENT INTE	.01037 .01401 .00425
238) 747/1		222	3.29 GA	DCD 00490 00777	3.30 GR	DCD 00359 00512 00141	3.30 GR	DCD 00341 00437 00179	747/1			3.34 GR	000 01008 02327 00679	3.34 GR	DCD -,00939 -,02058 -,00507
: 14-120(CA23B		.0000 IN. XO .0000 IN. YO .0000 IN. ZO	RN/L #	DCL 03742 06345 04833	RN/L .	DCL 02424 04352 04582	RN/L *	DCL 01907 03799 04517	14-120(CA23B)		.0000 IN. YO	RN/L	000 05596 09685 04451	RN/L =	DCL -,05299 -,04552
ARC		1109	10 · 0 · 0	ALPHAO 8.000 10.000 GRADIENT	NO. 0/ 0	ALPHAO 8.000 10.000 GRADIENT	0. 0/0	ALPHAO 8.000 10.000 GRADIENT	ARC		1109.	0.00.0	ALPHAO 10.000 12.000 GRADIENT	0 0 00	ALPHAO 10.000 12.000 GRADIENT
REFERENCE DATA		SREF = 2690.0000 SO.FT. XMRP LREF = 474.8100 IN. YMRP BREF = 936.6800 IN. ZMRP SCALE = .0125	RUN NO	02 30.000 30.000	RGN A	007 45.000 45.000	ON SOR	07 50 . 000 50 . 000		REFERENCE DATA	SREF = 2690.0000 53.FT. XMRP LREF = 474.8100 IN. YMRP BREF = 936.6800 IN. ZMRP SCALE = .0125	אטא אטא	02 3.500 3.500	RUN NO	02 7.500 7.500

PAGE 587	(17 OCT 75)	4	STAB = 5.000 ELEVON = 5.000 DX = .000 MACH = .600										
	(TNHY10)	PARAMETRIC DATA	.000 STAB .000 ELEVC B.000 DX .000 MACH		DCBL .00109 .00061		DCBL .00082 .00025 00006		DCBL . 00055 . 00030		DCBL .00061 00011		.00008 00008 00005
		_	BETA RUDDER LIORB COY	0/ 5.00	DCYN 00020 00073	00.5.00	DCYN 00036 00084 .00001	00/ 5.00	DCYN 00053 00097 00002	00/ 5.00	DCYN 00049 00085	-5.00/ 5.00	DCYN 00047 00086
	BITER DATA)			VAL # -5.00/	.00143 .00189 .00011	NAL = -5.00/	00073 .00073 .00128	3VAL = -5.00/	DCY .00089 .00065	RVAL = -5.00/	DCY .00171 .00160		.00184 .00200
	747/1 ATI 0251 (ORBITER DATA)			GRADIENT INTERVAL	DCLM . 00924 . 01266	GRADIENT INTERVAL	DCLM .00788 .01097 00357	GRADIENT INTERVAL	DCLM .00585 .00812	GRADIENT INTERVAL	DCLM .00471 .00607	GRADIENT INTERVAL	00395 .00395 .00547
38				3.33 GRA	000 00875 01869 00407	3.35 GRA	DCD 00790 01698	3.35 GR/	000 00437 01076	3.35 GR	DCD 00196 00557 00225	3.35 GR	DCD 00201 00414
DATA - CA23B	=	•	0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L	DCL 05042 08651 04611	RN/L =	DCL 04964 08292	RN/L =	DCL 03469 06209	ENVL #	DCL 02027 04376 04649	RN/L *	0cr 02202 03846
TABULATED SOURCE DATA	ARC		# 1109.	0 /0	ALPHAO 10.000 12.000 GRADIENT	0 /0	ALPHAO 10.000 12.000 GRADIENÍ	0, 0	ALPHAO 10.000 12.000 GRADIENT	0, 0	ALPHAO 10.000 12.000 GRADIENT	0.0	ALPHAO 10.000 12.000
TABIT		4 C	MEFERENCE DATA 0000 SQ.FT. XMRP 8100 IN. YMRP 6800 IN. ZNRP	RUN NO.	02 10.000 10.000	S NO	02 15.000 15.000	S YOUNG	52 30.000 30.000	NOR NO	02 45.000 45.000	ON NOR	02 50.000 50.000
0	0 2		MENERE 2690.0000 S 474.8100 1 936.6800 1										
,	טאוב בט יואת יס		SREF * LREF * BREF *				1	. 4 7	PAGE	B			

ORIGINAL PAGE IS OF POOR QUALITY (TNHY13) (17 UCT 75)

	5.000 .000 .000 .000												
DATA													
PARAMETRIC			DCBL .00102 .00118		DCBL .00087 .00115		DCBL . 00074 . 00100		DCBL .00070 .00092		DCBL .00039 .00068		DCBL .00040 .00056
	BETA RUDDER IORB DY	00/ 5.00	DCYN .00019 .00001	00.5.00	. 00000 . 00000 . 00000	00/ 5.00	DCYN .00003 00005	.00/ 5.00	DCYN 00002 00011	10/5.00	DCYN 00010 00006	0/ 5.00	DCYN 00003 00019
		4VAL = -5.00/	.00123 .00023 .00014	WAL = -5.00/	DCY .00035 00010	WAL = -5.00/	DCY 00026 .00000	ii Č	000 -,00054 -,00019	WAL = -5.00	DCY 00052 .00076	WAL = -5.00/	DCY 00004 .00039
		GRADIENT INTERVAL	DCLM .01274 .01614	GRADIENT INTERVAL	DCLM .01019 .01325 00425	GRADIENT INTERVAL	DCLM .00962 .01252 00400	GRADIENT INTERVAL	DCLM .00806 .01095 00357	GRADIENT INTERVAL	DCLM .00677 .00893 00317	GRADIENT INTERVAL	DCLM .00599 .00732
		3.34 GR	DCD 00890 01668 00679	3.34 GR	DCD 00650 01532	3.33 GR/	DCD 00836 01485 00407	3.35 GR/	DCD 00707 01332 00234	3.35 GR/	DCD 00497 00927 00066	3.35 GRA	0c0 00368 00620 00225
	109.0000 IN. XO .0000 IN. YO 375.0000 IN. ZO	RN/L .	DCL 05878 10819 04451	RN/L	DCL 05758 10112 04552	RN/L =	DCL 05623 09876 04611	RN/1 =	DCL 05394 09436 04711	RN/L =	DCL 04032 07330 04785	RN/L =	DCL 02973 05703 04649
	1109	0 0 0	ALPHAO B.000 10.000 GRADIENT	0. 0/ 0	AL PHAO 8.000 10.000 GRADIENT	0 0 0	ALPHAO 8.000 10.000 GRADIENT	0 / 0 .	ALPHA0 8.000 10.000 GRADIENT	0 /0 .0	ALPHAO 8.000 10.000 GRADIENT	0 /0 .0	ALPHAO 8.000 10.000 GRADIENT
REFERENCE DATA	2690.0003 SO.FT. XMRP 474.8100 IN. YMRP 936.6800 IN. ZMRP .0125	ACN NO.	02 3,500 3,500	RUN NO	02 7.500 7.500	FUN NO	00 10.000 10.000	RUN NO	02 15.000 15.000	P.UN NO	000 : 08 30 : 000 32 :	PUN NO	02 45.000 45.000
	2690 474 936												

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### 76 REFERENCE DATA ## 2690.0000 SQ.FT. #74.8100 IN. #36.6800 IN. #3	ABULATED ATA XMRP = ZMRP =	v -	14-12000 10000 IN.	1/247	AT1 0251 (OR	(ORBITER DATA)	BETA BUDDER I	(TNHY13) PARAMETR1C D .000 S	3) (17 OCT 3 DATA STAB = ELEVON = DX :	5.000 5.000 5.000
	RUN NO. DZ 50.000 50.000	ALPHAO B.000 10.000 GRADIENI	RN/L = DCL027050501804612	3.35 GRA DCD 00277 00484	GRADIENT INTERVAL DCLM 00541 .0056700370	UAL5.00/ DCY .00010 .00058 -	DC 7N DC 7N DC 7N 00003	DCBL .00057 .00069	AACH	000
REFERENCE DATA 2690.0000 SQ.FT. 474.8100 IN.	DATA XMRP YMPP	AR 109	C 14- 120 (CA238)	1/247	A11 0251 (OF	CORBITER DATA	BETA = RUDDER =	PARAMETRIC D	18) (17 OCT 5 DATA STAB = ELEVON =	5.000 5.000
	RUN NO DZ 3.500 3.500	0/ 0 ALPHAO 8,000 10,000 5RAC:E41	47L = 11 102330 10297	3.34 DCD 00980 01675	GRADIENT INTERVAL DCLM D .01241 .0167000468	-5. CY 00152 00074 00014	DC N 000 000 000 000 000 000 000 000 000	10.000 DCBL 00180 00430	MACH .	009.
2	RUN NO 02 7.500 7.500 RUN NO	ALPHAO B.530 10.53 GRADIENT	RN/L = DCL 04861 09333 04552 RN/L =	3.34 GR DCD 00818 01465 00507 3.33 GR	GRADIENT INTERVAL OCLM 01018 01303004253 GRADIENT INTERVAL	TVAL = -5. DCY0001600109 .00012	00/ 5.00 DCYN 00135 00135 .00005	DCBL -,00144 -,00307 -,00011		
per sen	DZ 10.000 10.000 RUN NO DZ 15.000	ALPHAO 8.000 10.000 GRADIENT 0.07 0/0 8.000 9.000 GRADIE:T	DCL 04836 08374 04611 RN/L * DCL 04619 08357 04711	000 00780 01360 00407 3.35 GR 000 00709 01209	DCLM 00931	DCY .00028 00111 .00011 RVAL = -5. DCY 00011 0009	DCYN 00080 00136 .00004 00/ 5.00 DCYN 00067 00067	DCBL 00148 000199 001195 001140 001140 001140 001195 00006		

(TNHY18) (17 OCT 75)

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA)

	600. 000. 000. 000.							OCT 75)		5.000 .000 .000 .600					
: DATA	STAB = ELEVON = DX + HACH =							(17	DATA	STAB E ELEVON D DX MACH					
PANAMETRIC	. 000 . 010 . 000 . 010 . 000 . 01		DCBL 00071 00097		DCBL 00037 00055		DCBL 00016 00042 00005	(1NHY19)	PARAME TRIC	.000 .000 .000 .000		DCBL -,00235 -,00558 -,00014		DCBL 00176 00431 60011	
	BETA RUDDER RIORB R	5.00/ 5.00	DCYN 00034 00068	.00/ 5.00	00017 00051	00/ 5.00	DCYN 00010 00052	•		BETA RUDDER I	00/ 2.00	DCYN 00173 00141	00/ 5.00	DCYN 00138 00135	
			00024 00045 00045		00039 .00039 .00044	# .5.	70000. 90000. 90000.	(ORBITER DATA)			# īċ	0CY .00060 00223	RVAL = -5.0	.00063 00161 0018	
		GRADIENT INTERVAL	DCLM .00605 .00801	GRADIENT INTERVAL	DCLM .00522 .00657 00359	GRADIENT INTERVAL	DCLM .00470 .00603 00370	AT1 0251 (0			GRADIENT INTERVAL	DCLM .01293 .01747 00468	GRADIENT INTERVA	DCI.M .01136 .01524 00425	
		3.35 GR	DCD 00470 00781 00066	3.35 GR	DCD -, 00264 -, 00456 -, 00225	3.35 GR	DCD 00239 00387 00265	747/1			3.34 GR	DCD 01392 02199 00679	3.34 GR	01090 02074 00507	
	1109.0000 IN. YO .0000 IN. YO 375.0000 IN. ZO	RN/L .	DCL 03742 06673 04785	RN/L =	DCL 02352 04797 04649	RN/L .	DCL 02311 04420 04612	14-120(CA23B)		. 0000 IN. XO . 0000 IN. YO . 0000 IN. ZO	RN/L .	DCL 05218 09010 04451	RN/L =	DCL 04884 08693 04552	
	# H #	10 . O. D	ALPHAO 8.000 10.000 GRADIENT	NO. 0/ 0	ALPHAO 8.000 10.000 GRADIENT	NO. 0/ 0	ALPHAD 8.000 10.000 GRADIENT	ARC		1109	0. 0/ 0	ALPHAO 10.000 12.000 GRADIENT	NO. 0/ 0	ALPHAO 10.000 12.000 GRADIENT	
REFERENCE DATA	2690.0000 SQ.FT. XMRP 474.8100 IN. YMRP 936.6800 IN. ZMRP .0125	RUN NO	D2 30.000 30.000	RUN N	02 45.000 45.000	FUN N	02 50.000 50.000		REFERENCE DATA	2690.0000 SQ.FT. XMRP 474.8100 IN. YMRP 936.6800 IN. ZMRP	RUN NO	02 3.500 3.500	RUN	02 7.500 7.500	
	SREF BREF SCALE									SREF = 2 LREF = BREF = SCALE =					

PAGE 591	(17 001 75)	_	000.00 00										
	(TNHY19)	PARAMETRIC DATA	.000 STAB .000 ELEVON 8.000 DX 10.000 MACH		DCBL 00147 00343 00009		DCBL 00070 00233		DCBL 00011 00100 00002		DCBL 00014 00079 00004		DCBL .00015 - 00057
		•	BETA # RUDDER # 10RB # DY	00.5 /00	DCYN 00116 00135	00/ 2.00	DCYN -,00084 -,00118	-5.00/ 5.00	-, 000002 -, 000002 -, 000002	.00.8 .00.	DCYN 00058 00074	-5.00/ 5.00	DCYN 00050
	0251 (ORBITER DATA)			WAL = -5.00/	. 000110 00110	RVAL = -5.00/	DCY 00006 00070		DCY . 03039 00395	ា សិ	00115 .00115 .00182		00125
				GRADIENT INTERVAL	DCLM .01028 .01367 00400	GRADIENT INTERVAL	DCLM .00849 .01199 00357	GRADIENT INTERVAL =	DCLM .00649 .00891	GRADIENT INTERVAL	CCLM :00543 :00709	GRADIENT INTERVAL	00LM .00512
38	B) 747/1 AT1			3.33 GRA	0CD 03880 02014 00407	3.35 GRA	DCD 00757 01761 00234	3.35 GR	DCD 00473 01062 00066	3.35 GR	0CD -, 00259 -, 00528 -, 00225	3.35 GR	DCD 0018 5
SOURCE DATA - CA238	14-120(CA238)		10C0 IN. XO 1000 IN. YO 1000 IN. ZO	RN/L =	DCL 04493 08455 04611	RN/L =	DCL 04849 08195 04711	RN/L =	DCL 0377; 06056 04785	RN'L *	DCL 02317 04111 04649	R3/L =	DCL 01980
	ARC		1109.0000 * .0000 * 375.0000	0 /0	ALPHAO 10.000 12.000 GRADIENT	0 00	ALPHAO 10.000 12.000 GRADIENT	0 00	ALPHAO 10.000 12.000 GRAD!ENT	0, 0	ALPHAO 10. 000 12. 000 GPAD:ENT	o /o o.	A1PHAO
TABULATED		REFERENCE DATA	SO.FT. XXXXP IN. YXXP IN. ZMRP	RUN NO.	02 10.000 10.000	RCN NO	02 15.000 15.000	S SOR	02 30.000 30.000	RCN NO.	DZ 45.330 45.003	RCS NO.	52 59,000
MAR 75	2	REFEREN	2690.0000 SQ. 474.8100 IN. 936.6800 IN.										
_	-												

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DATE 23 MAR 76

SREF ELREF BREF SCALE

c or	Г	C		5.000	. 600										
PASF	-		DATA	STAB # ELEVON # DX	# HOAM										
	(TANH X32)		PARAMETRIC	000. 8.000.	000.	DCBL .00027 .00053		DCBL .00047 .00037		DCBL .00073 .00025		DCBL .00027 .00018		. 00024 . 00012	,
	-	:		BETA RUDDER 1	-5.00/ 5.00	. 00125 - 00009 - 00011	-5.00/ 5.00	00085 - 00085 - 00009	00/ 5.00	DCYN .00062 .00003	00/ 5.00	8000	10/ 5.00	2000	
	747/1 AT1 03S1 (ORB; TER DATA)					DCY .00343 .00236 00023	*	DCY .00239 .00283	RVAL = -5,00/	DCY .00132 .00295	RVAL : -5.00/	005/28 .005/28 .0000	7VAL = -5.00/	DCY .00199 .00363	
	AT1 0351 (GRADIE 4T INTERVAL	02LM -01474 -02246 -00748	GRADIENT INTERVAL	DCLM .01230 .01871 00548	GRADIENT INTERVAL	0000 -01029 -01571 60589	GRADIEHT INTERVAL	DCLM .00928 .01445 01445	GRADIERT INTERVAL	DCLM . 00604 . 01151 00394	
A238				000	3.31 0	DCD 00702 02099	3.30 GF	DCD 00708 02040 00392	3.30 GR	DCD 00691 02008 00302	3.30 GP	000 00745 01882 00146	3.29 GR	000 00454 01361	
SUURCE DATA - CA238	C 14-120(CA23B)			00	RN/L =	DCL 04445 09119 03891	RN/L .	DCL -,04596 -,08850 -,04155	RN/L *	DCL 04651 08733 04310	RN/L =	DCL 04708 08157 04577	RN/L =	DCL -,03604 -,06040 -,04833	
TECHNICE SOOK	APC			# H H	10. 0/ 0	ALPHAO 10.000 12.000 GRADIENT	0.00	AL PHAO 10.000 12.000 GRAD1ENT	0.00	AL PHAO 10.000 12.000 GRADIENT	0 00 0	ALPHAO 10.003 12.000 GRADIENT	0 /0 .0	ALPHAO 10.000 12.000 SPACIENT	č
1		REFERENCE DATA		7888 10. 10. 2888 10.	ON NO.	02 3.500 3.500	PCN NO	02 7.500 7.500	FUN NO.	02 10.336 10.000	RUN NO.	02 15.000 15.000	ON NOE	92 30.000 30.000	0.4
ı		REFERE	שנים מסטם	474.8100 1 936.6800 1 0125											

DCBL -.00018 .00037 -.00006

.00007 .00007 .00021

DCY . 002 15 . 002 56 . 0002 8

DCLM . 00591 . 01051 - . 00493

DCD -.0026! -.00972

DCL -.02089 -.04165 -.34582

ALPHAO 10.000 12.000 6PADIENT

3.30 GRADIENT INTERVAL = -5.007 5.00

RN/L =

PU1 1:0. 0/ 0

269	1 75 1		5.000	. 600			(27 T		5.000 .000 .000 .600								
PAGE	7) (17 OCT	DATA	STAB ELEVON	MACH .		í	32) (17 OCT	C DATA	STAB ELEVON BOX MACH R								
	(TNHY27)	PARAME TR 1 C	000.	000. 000.		00014 00014 00053 00009	(TNHY 32)	PARAME TRIC	.000.000.01		DCBL 00148 00358 00038		DCBL 00153 00275 00025		DCBL 00129 00250		DCBL -,00125 -,00229 -,00004
			œ	10RB	.00/ 5.00	DCYN .00007 .00033			BETA RUDDER I IORB I DY	.007 5.00	DCYN 00120 00157 00011	00/ 5.00	DCYN 00083 00107 00009	.00/ 5.00	DCYN -,00067 -,00121 -,00009	00/ 2:00	DCYN -, C0059 -, C0115
	(ORBITER DATA)				សុ	DCY .00232 .0024	(ORBITER DATA)				DCY .00108 .00131 00023	יי לז	DCY .00068 .00006 00015	ı,	00096 00096 000027	RVAL = -5.	.00099 00027 000027
	0351				GRADIENT INTERVAL	DCLM .00495 .01026 00519	AT1 0351 (OR			GRADIENT INTERVAL	DCLM . 01349 . 01577 00748	GRADIENT INTERVAL	CCL,M .00930 .01109 00648	GRADIENT INTERVAL	DCLM .00923 .01019	GRADIENT INTERVAL	M 100 005800 00588 00588
œ	1747/1 AT1				3.30 GRAE	DCD 00237 00843 00179	1 747/1			3.31 GRA	000 00883 01462 00547	3.30 GR/	000 00774 01317 00358	3.30 GR	000 00735 01267	3.30 GR	000 00685 01152 00146
DATA - CA238	9		0X .NI 0000.	Z	RN/L =	DCL 01952 03641 04517	14 - 120 (CA238		1000 IN. XO	# J.Nd	DCL 04659 03279 03891	Rt/L =	001 - 0. 353 - 08615 - 04155	RN/L	DCL 04733 08796 04310	F'1/L =	000 04682 03165 04577
ATED SOURCE DATA			100	375	0 /0 .	AL PHAO 10.000 12.000 GRADIENT	ΩNA ON A	!	1109.0000 0000 1 375.0000	0 / 0	ALPHAO B.000 10.000 GRADIENT	0, 0, 0	AL. PHAO 8.000 10.000 GRAD LENT	0, 0, 0	ALPHAO 8.000 10.000 GRADIENT	10. 01. 01.	ALFHAO 8.030 10.600 GRADIENT
TARU ATED		* E	T. XMRP		RUN NO	50.000 50.000		7 A T A	FT, XMRP YNRP ZMRP	RUN NO	02 3.500 3.500	RUN NO	02 7.500 7.500	RUN 130	000 - 01 10 - 000 10 - 01	RUN NO	02 15.000 15.000
0 0 7 7			* 2690 .	936.6800 936.6800 = 936.085					# 2690. # 474. # 936.								
	2 4 7		SPEF	LALF BREF SCALE					SREF LREF BREF SCALE								

TABULATED SOURCE DATA - CA23B

	_		00 00							
190°C	75		7 000.000.00000000000000000000000000000							
۵	32) (17.007	DATA	STAB ELEVON B DX MACH							
	(TNHY32)	PARAMETRIC			DCBL 00089 00122		DCBL 00069 00067		DCBL 00087 00056	
	Ā		BETA RUDDER I	-5.00/ 5.00	DCYN 00017 00051	-5.00/ 5.00	DCYN 00026 00037	-5.00/ 5.00	DCYN 00020 00028	
	DRBITER DAT				.00101 .00038 .00038		.00019 .00028 .00028	#	DCY .00035 .00044 .00032	
	747/: ATI 0351 (ORBITER DATA)			GRADIENT INTERVAL .	DCLM . 00536 . 00797 00394	GRADIENT INTERVAL =	DCLM ,00536 ,00651 -,00493	GRADIENT INTERVAL	DCLM .00560 .00659	
A23B			X X X X X X X X X X X X X X X X X X X	3.29 6	0CD 00432 00707 00005	3.30 6	DCD 00307 00464 00141	3.30 6	000 00254 00368 00179	
E DATA - C	RC 14-120 (CA23B)		375.0000 IN. X	RN/L .	DCL 03575 06274 04833	RN/L .	DCL 02312 04632 04582	RN/L	DCL 01875 03838 04517	
TABULATED SOURCE DATA - CA23B	ARC		* # #	0. 0/ 0	ALPHAO 8.000 10.000 GRADIENI	0 / 0	ALPHAO 8.000 10.000 GRADIENT	0 0 0	ALPH70 8.000 10.000 GRADIENT	
I ABC		REFERENCE DATA	O.FT. XMRP N. YMRP N. ZMRP	RUN NO.	02 30.000 30.000	RUN NO.	DZ 45.000 45.000	FUN NO.	02 50.000 50.000	
0		REFERE	2690.0000 50.FT. 474.8100 IN. 935.5930 IN.							
מי אמיז כם פואט			SREF ** LREF ** BREF ** SCALE **							

(TNHY33) (17 OCT 75)	PARAMETRIC DATA	.000 STAB # 5.000 .000 ELEVON # .000 8.000 DX # .000 10.000 MACH # .600	
ARC 14-120(CA238) 747/1 ATI 0351 (ORBITER DATA)		BETA RUDDER H 10RB H DY R	RN/L * 3.31 GRADIENT INTERVAL = -5.00/ 5.00
ARC 14-120(CA238)	REFERENCE DATA	SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO LPEF = 474.8100 IN. YMRP = .0000 IN. YO BREF = 936.6900 IN. ZMRP = 375.0000 IN. ZO SCALE = .0125	PUN NO. 0/ 0 RN/L = 3.31

DCBL . 00249 . 0056 . 00036 . 00190	!
111 - 111	
DCYN 600093 300011 -5.00/ 5.00 DCYN 100077	
DCY 3100056 3200100 4800623 INTERVAL = -5 DCY DCY DCY BB00014 8900014	
DCLM .01431 .02102 06748 .0748 .01888 00648	1
DCD 01369 02532 00547 3.30 Gl ECD 01028 02358	
DCL050960967103831 RN/L = DCL04894092400924009155	
ALPHAO 10.000 12.000 6PADIENT 10. 0/ 0 ALPHAO 10.000 12.000 CHADIENT	
3.500 3.500 8.500 7.500 7.500	

595	75		5.000	0009										
PAGE	3) (17 007	DATA	- 64.49	ELEVON										
	(TNHY33)	PARAME TRIC	c	8 .000 000 .01		DCBL 00154 00368 00017		DCBL 00134 00302 00004		DCBL 00052 00093		DCBL 00034 00004		DCBL 00030 00026 00009
				BETA ** RUDDER ** LORB ** DY	0/ 5.00	DCYN -,00063 -,00133 -,00009	0/ 5.00	DCYN -,00054 -,00132 -,00007	.00/ 5.00	DCYN -,00023 -,00104 -,00003	00/ 2.00	DCYN -,00042 -,00000	.007 5 00.	DCYN 0000.
	BITER DATA				VAL = -5.00/	00039 00006 00006	VAL = -5.00/	00084 . 000084 - 00002	t.	00121 .00121 .00116	3VAL = -5.007	00109 .00109 .00134	. گ	.00135 .00137 .00032
	747/1 ATI 0351 (ORBITER				GRADIENT INTERVAL	DCLM .01050 .01740 00589	GRADIENT INTERVAL	DCLM .00908 .01559 00488	GRADIENT INTERVAL	M 10G 78700. 498.10. 498.00	GRADIENT INTERVAL	00cm .00694 .01217	GRADIENT INTERVAL	DCLM .00651 .01158
38	_				3.30 GRA	DCD 00793 02231 00302	3.30 GRA	DCD 00742 02057 00146	3.29 GR	000 -,00457 -,01370 -,0000	3.30 GR	DCD 00240 01026 00141	3.30 GR	0CD -,00253 -,00975
DATA - CA23B				0000 IN. XO 0000 IN. YO 0000 IN. ZO	RN/L ≈	DCL -, 04674 -, 08918 -, 04310	RN/L =	0CL 04757 08444 04577	RN/L .	DCL .,03432 .,05625 .,04833	RN/L =	DCL 01984 04163 04582	R:1/L =	DCL 01861 03856 04517
TED SOURCE DATA	1			# 1109. # 375.	0 /0 .	AL PHAO 10.000 12.000 GRADIENT	0 /0	ALPHA0 10.000 12.000 GRADIENT	0 0 0	ALPHAD 10.000 12.000 GRADIENT	0 00 0	ALPHAO 10.000 12.000 GRADIENT	0 0 0	ALPHAO 10.000 12.000 GRADIENT
TARIH ATED		47.40	, CA.	FT. XMRP YMRP ZMRP	RUI NO.	02 10.000 10.000	SCN NO	02 15.000 15.000	FCA NO.	52.000 30.000 30.000	PUN NO.	02 45.000 45.000	RUN NO.	50.000 50.000 50.000
	טאינ בא יואא יס		MET EMEN	SAEF = 2590.0000 50.F' LAFF = 474.8100 IN. BPEF = 936.6800 IN. SCALE = .0125						-				

TABULATED SOURCE DATA - CA238

ARC 14-120(CA23B) 747/1 ATI 03SI (ORBITER DATA)

(17 0CT 75)

(TNHY34)

596

PAG.

	0000.										
DATA	STAB ELEVON ** DX MACH		·								
PARAME TRIC	000.		DCBL .00015 .00020		DCBL .00002 .00013		DCBL 00002 .00002		DCBL 00018 .00009 00009		DCBL 00047 00009
	BETA RUDDER : 10RB :	-5.00/ 5.00	00019 .00019 .00043	-5.00/ 6 .00	00007 00007 000024	-5.00/ 5.00	004N 00004 00015	00.5.00	00 YN 00015 .00015	00/ 5.00	00000 00000 000055
			DCY .00363 .00350		DCY .00309 .00288		00301 .00503 .00013	TVAL # -5.00%	DCY .00301 .05001 .00001.	TVAL = -5.00/	DCY .00301 .00255
		GRADIENT INTERVAL .	DCLM .01688 .01986	GRADIENT INTERVAL .	DCLM .01236 .01450 00648	GRADIENT INTERVAL	DCLM .01009 .01297 00589	GRADIENT INTERVAL	DCLM .00700 .01025	GRADIENT INTERVAL	DCLM . 00639 . 00850 00394
		3.31 GR	000 -,00879 -,01458 -,00547	3.30 GR	DCD 00814 01351 30392	3.30 GR	000 00779 01294 00302	3.30 GR	000 00725 01175 00146	3.29 GR	000 00489 00778 .00005
	0000 IN. YO	RN/L =	DCL -,05437 -,10107 -,03891	RN/L .	DCL -,0515 6 -,09385 -,04155	PN/L =	DCT -,05304 -,09063 -,04310	RN/L .	.05072 05072 09597 04577	RN/L =	000 7.03742 7.06343 7.04833
	. 1169.0000 	0, 0,	AL PHAO 8.000 10.000 GRADIENT	0, 0, 0	AL PHAO B.000 10.000 GRAC!ENT	0 /0 .0	ALPHAD B.C00 10.C00 GRADIENT	0 /0 .0	ALPHAD B.000 10.000 SRADIENT	0 0 0	ALPHAO 8.000 10.000 6RAD (ENT
PEFERENCE DATA	SPEF = 2690.0000 SQ.FT, XMRP LPEF = 474.8100 IN. YMPP BREF = 925.6900 IN. ZMRP SCALE = .0125	PUN NO.	.02 3.500 3.500	RUN NO.	02 7.500 7.500	ACN NO	20 000:01 0:00:01	BUN NO	05 15.000 15.000	RUN NO.	52 30.030 30.030

DCBL -,00073 .00003 -,00006

00.4N -.00027 -.000076

00190 .00190 .00194 .00528

DCLM . 00643 . 00762 -. 00493

000 -.00360 -.00513

DCL -.02417 -.04343 -.04582

ALPHAO B.000 10.000 GPADIENT

02 45.003 45.000

3.30 GRADIENT INTERVAL = -5.007 5.00

= 7/Nd

PUT NO. 07 0

597	. 27		5.000 .000 .000 .000			1. 27		5.000						
PAGE	34) (17 OCT	DATA	STAB . ELEVON . DX			08) (17 OCT	C DATA	STAB ELEVON BOX		ALPHAO 00000 00000 00000 00000 00000		AL PHAO 6. 00000 9.00000 10.00000		ALPHAO 6. UNDOO 8. DOODOO 11. 000000
	(TNHY34)	PARAMETRIC	. 000 . 000 6. 000 . 000		DCBL 00071 00019	(B00HN+)	PARAME TRIC	000.		885-		95 77 18 05		8 - 0 0 0 - 0 0
		u	BETA ** RUDDER ** 10RB ** DY	5.00	DCYN 00019 00013			BETA RUDDER TORB	·	Δ		mm + +		_
	DATA		# 5 2 5	-5.00/	5000. - 60167 - 62500. - 825000.	R DATA)		a ≈ - 0	5.00	00033 .00033 .00065 .00003	5.00	MADO 00019 00003 00000.	2.00	. 00001 . 00001 . 00001 . 100004
	(ORBITER			NTERVAL .		ORBITER			* -5.00/	00186 .00186 .00217 .00134	* -5.00/	00111 .00113 .00123 .00039	-5.00	00035 - 00097 - 00097
	AT1 0351			GRADIENT INTERVAL	DCLM .00567 .00756 00519	AT1 0251	•		INTERVAL	DCLM .01187 .0158 .01522	INTERVAL	0°LM .00835 .00911 .01235	INTERVAL	DCLM .00725 .05867 .01126
8 5 4 5 C 4 C	238) 747/1		0	3.30	000 00342 00439	1/242 (822)		0×2 700 700 700	GRADIENT	0 00700 	GRADIENT	000 00582 00930 01636 00764	CRADIENT	000 00527 03880 75210
4	14-120(0		żżż	RN/L	DCL 01906 03799	(87.48.7)		.0000 1N.		984 931 750	3.35	DCL 0.2505 0.5555	L * 3.35	DCL 02359 05175 10749
	IEU SCURCE		1109.0000 2 .0000 375.0000	0 /0	ALPHAO 8.000 10.000 GRADIENT	C	Č.		α		RN/L		RN/L	
Ĉ	TABULATED	į	XMRP YMRP ZMRP	NO.	50.000 50.000		;	XMRP YMRP		3.500 ALPHAC .000 2.000 4.000 GRADIENT		7.500 At PHAC . 000 2.000 4.000 GRADIENT		10.000 ALPHAC .000 2.000 4.000
	MAR 76		REFERENCE DATA 2690,0000 SU.FT. 474.8100 IN. 936.6900 IN. 0125) - -	0 0 0 0 0			FEFENCE DATE 2000 0000 SO.FT. 474.8100 IN. 975. SAR IN.		• 20		• 20		• 20
	DATE 23 M		00 L 00	و				SPECT PETT PETT PETT PETT PETT PETT PETT	a 11					

PAGE 598	(27 75)		5.000								
	(4NH008) (17	PARAMETRIC DATA	.000 STAB .000 ELEVON .000 DX		ALPHAO 6.00000 8.00000 10.00000		AL PHAO 6.00000 8.00000 10.00000		AL PHAO 6. 00000 8. 00000 10. 00000 1. 00000		AL PHAO 6.00000 8.00000 10.00000
		PARA	# # # # 9		DCBL .00057 .00042 .00091		DCBL .00034 .00055 .00055		DCBL .00033 .00022 .00029		DCBL . 00024 . 00036 . 00041
	DATA		BETA RUDDER IORB DY	5.00	DCYN 00003 90003	5.00	CCYN 00008 00008 00018	5.00	DCYN 00014 00024 00024	5.00	DCYN -, 02019 -, 00003 -, 000024 -, 000024
	0251 (ORBITER DATA)			-5.00/	000 . 00045 . 00683 . 00683	-5.00/	DCY 00006 00012 .00086	-5.007	. 00014 . 00015 . 00015 . 00026	-5.00/	
	747/1 AT1 02			NT INTERVAL	MJD0 .058203. .0000. .0000.	NT INTERVAL	DCCM 04200. 16200. 16200.	41 INTERVAL	DCLM .00277 .00418 .00573	I NTERVAL	DCLM .00271 .00398 .00519
1 - CA238	14-120(CA23B) 7		2 2 2 X X X X X X X X X X X X X X X X X	35 GRADIENT	DCD -,00437 -,01281 -,01281	35 GRADIENT	DCD 00256 00511 00954	.34 GRADIENT	000 00154 00583 00583	.33 GRADIENT	DCD 00133 00522 00527
SOURCE DATA	APC 14-15		1109.00011 .0000 375.0000	RN/L = 3.	DCL 	RN/L = 3.	DCL 02255 04697 01447	RN/L = 3.	DCL 02209 03717 65073	P. 1 3.	100 - 01841 - 03382 - 05772 - 01970
TABULATED		1TA	XMRP YMRP ZMRP		15.000 ALPHAC .030 2.000 4.000 GRADIENT		30.000 ALPHAC .000 2.000 4.000 GRADIENT		45.000 ALPHAC .000 2.000 4.000 GRADIENT		59.000 ALPHAC .000 2.000 4.000 GRAD:ENT
		REFERENCE DATA	S0.FT. IN: IN:		•		•				•
87 Fi		REFE	2690,0000 474,8100 936,6800		20		20		20		20
DATE 23 MAR			SPEF * 20 BPEF * SCALE *								

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PAGE 599	0CT 75 1		5.000 .000 .000								,		
PA	0 L1 3 (600HN+)	TRIC DATA	.000 STAB .000 ELEVON .000 DX		ALPHAO ° 8.00000 10.00000 12.00000 1.00000		ALPHAO B.00000 10.00000 12.00000		ALPHAO 8.00000 10.00000 12.00000 1.00000		ALPHAO 8.00000 10.00000 12.00000 1.00000		ALFHAO 8.00000 10.00000 12.00000 1.00000
	_	PARAME TRIC	s s s s		DCBL .00104 .00173 .00061		DCBL .00086 .00141 .00057		DCBL . 00056 . 00119 . 30056	u.co	DCBL .00051 .00391 .00391 .00045		DCBL .00017 .00062 .00047 .00047
	DATA		BETA RUCDE TORB DY	5.00	DCYN .00025 00006 00033	5.00	00003 -00003 -00003 -00043	5.00	ပ်ဝပ်ဝပ		2007 - 1000 - 1000 - 1000 - 1000	5.00	DCYN - , C9025 - , C9035 - , C9035 - , C90216
	ORBITER			-5.00/	00291 .00291 .00207 .00220	-5.00/	DCY .00190 .00205 .00226	* -5.00/	00. 00.123 00. 00. 00. 00. 00.	·50'5' *	0007 - 00003 - 00072 - 00194 - 00099	-5.03/	00000 00000 00000 00000 00000 00000
SOURCE DATA - CA238	747/1 ATI 0251			INTERVAL	DCLM .00900 .01174 .01638	NT INTERVAL	DCLM .00636 .01011 .01445	NT INTERVAL	0000 0000 00004 01313	INT THERWAL	00548 .00548 .00764 .001183	ENT INTERVAL	рсги - 00 жде - 00 жде - 00 жде - 11 со
	14-120(CA239)		000 X X X X X X	34 GRADIENT	DCD 00528 01136 02550	35 GRADIENT	000 - 00366 - 01113 - 02390 - 02390	.35 GRADIENT	000 -,00520 -,01105 -,02268 -,06437	.35 CHADIENT	0040 - 00453 - 01038 - 01038	3.35 CHADIENT	000 -, 90263 -, 90363 -, 01363 -, 01363
		•	11 0000.0011 11 0000. 17 0000.375	BN/L = 3.	DCL 01518 05613 10957	RN/L = 3.	DCL -, 01496 -, 05133 -, 10487 -, 62243	PN/L = 3	DCL -, 92359 -, 05523 -, 10563 -, 51976	2 1/12d	00L -, C263T -, C2643 -, C294T	RNSL =	DCL - 01998 - 050999 - 07339
TARIN ATED			A A A A A A A A A A A A A A A A		3.500 ALPHAC .000 2.000 4.000 GRADIENT		7.500 ALPHAC .000 P.CCC 4.000 GRADIENT		10.030 ALPHAC .020 2.030 4.000 GRACIENT		15.000 ALPHAC .000 2.000 H.000 GRADIENT		30.000 ALPHAC 0000 8.0000 4.0000 6.0000 6.0000 6.0000
		į	ا با ا		•		•		•		•		•
,			2690,0000 SO.FT. 471,8100 IN. 936,6800 IN.		2 0		Z 0		20		20		20
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DATE 23

SREF LREF BREF SCALE

PAGE 600	(4NH009) (17 OCT 75	PARAMETRIC DATA	.000 STAB -1.000 .000 ELEVON 5.000 8.000 DX .000		ALPHAO 8.00000 10.00000 12.00000 1.00000		ALPHAO 8.00000 10.00000 12.00000 1.00000	(4NH010) (17 OCT 75)	PARAMETRIC DATA	.000 STAB = 5.000 .000 ELEVON = 5.000 B.000 DX = .000 .000 MACH = .600		ALPHAO B.00000 10.00000 12.00000 1.00000								
	R DATA)	PA	BETA - RUDDER - 10RB - DY		DCBL .00016 .00045 .00001		DCBL .00008 .00021 00002		PA	BETA RUDDER - 10RB - 00Y		DCBL .00036 .00062 .00024								
														8 9.729.79	5.00	1-4000 1-	5.00	DCYN - 000147 - 000957 - 000955	P DATA	
	O2S1 (ORBITER			L = -5.00/	.00103 .00103 .00157 .00279	5.00/	DCY .00147 .00172 .00266	0251 (ORBITER			5.00/	DCY .00276 .00153 .00203								
SOURCE DATA - CA23B	ARC 14-120(CA238) 747/1 AT1 0			GRADIENT INTERVAL	DCLM .00258 .00404 .00584	GRADIENT INTERVAL	DCLM .00281 .00371 .00506	747/1 AT1 06			INT INTERVAL	DCLM .01110 .01195 .01593								
			0000 N. X0 N. X0	3.34 GRAD !!	0CD 00162 00465 00810	. 33	DCD 00111 00388 00585	14-120(CA238)		IN. X0 IN. 70 IN. 20	3.33 GRADIENT	0CD -,00558 -,01027 -,02308 -,00437								
			1109.6900 .0000 375.0000	RN/L *	DCL 01829 04308 05644 00954	00954 RN/L = 3	DCL 01271 03660 05147	ARC 14-18		375.0000	RN/L = 3.	50L 00912 05553 09177								
TABULATED		DATA	XMRP YMRP ZMRP		45.000 ALPHAC .000 2.000 4.000 GRADIENT		50.000 ALPHAC .000 2.000 4.000 GRADIENT		ATA	XMRP # ZMRP #		3.500 ALPHAC .000 2.000 4.000 GRADIENT								
DATE 23 MAR 76		REFERENCE DATA	SAEF = 2690.0000 SQ.FT. LPEF = 474.8100 IN. BACF = 976.6800 IN. SCALE = .0125		* 20		• Z0			SREF = 2690.0000 50.FT. LREF = 474.8100 IN. BREF = 936.6800 IN. SCALE = 0.025		• 70								

109	. 75		5.000 .000 .600										
PAGE	(4NH010) (17 OCT	PARAMETRIC DATA	.000 STAB .000 ELEVON .000 DX		ALPHAO B.00000 10.00000 12.00000		ALPHAO 8.00000 10.00000 12.00000 1.00000		ALPHAO 8.00000 10.00000 12.00000		ALPHAO 8.00000 10.00000 12.00000 1.00000		AL PHAO 8.00000 10.00000 12.00000
		PARA	u # # #		DCBL .00046 .00089 .00047		DCBL .00057 .00119 .00073		DCBL .00036 .00087 .00036		008L .00016 .00069 .00036		DCBL .00009 .00064 00007
	DATAI		BETA RUDDET 10RB DY	5.00	.00005 .00005 .00062 .00062	5.00	00000 .00000 00016 00071	5.00	DCYN 00018 00035 00082	5.00	00044 00029 00052 00037	5.00	DCYN 00023 00148 00086
	(ORB 1 TER			-5.007	51000.	-5.00/	DCY .00070 .00149 .00198	-5.00/	0CY 00005 .00078 .00138	-5.007	.00062 00062 00093 00074	-5.00/	00008 .00174 .00174 .00159
	747/1 AT1 0251			IT INTERVAL	DCLM .00900 .01033 .01399	AT INTERVAL	DCLM .00734 .00916 .01263	NT INTERVAL	DCLM .00532 .00780 .01090	NT INTERVAL	DCLM .00455 .00580 .00805	ENT INTERVAL	DCLM . 00402 . 00467 . 00601 . 00050
- CA238			000 X	32 GRADIENT	000 -,00954 -,00933 -,02051	32 GRADIENT	DCD 00397 00869 01863	32 GRADIENT	0CD 00340 00782 01688	.33 GRADIENT	DCD 00166 00433 01068	.33 GRADIENT	DCD 00083 00191 00554 00118
SOURCE DATA	ARC 14		N1 0000,2011 N1 0000, N1 0000,375	RN/L = 3.	DCL 01196 05278 09080	RN/L * 3.	DCL 01473 05048 08654 01795	RN/L = 3.	DCL - 01291 - 049*4 - 01349	R11/L = 3	DCL -, 00777 -, 03449 -, 06201 -, 01356	SN/L = 3	DCL 00190 02559 04379 01547
TABLE ATEN		V	XMRP YMRP		7.500 ALPHAC .000 2.000 4.000 GRADIENT		10.000 ALPHAC .000 2.000 4.000 GRADIENT		15.000 ALPHAC .000 2.000 4.000 GRADIENT		30.000 ALPHAC .000 2.000 H.000 GRAD:ENT		45,000 ALPHAC .000 2.000 4.000 GRADIENT
		ב נו	SQ.FT.		•		•		•		u		•
3	C3 114K /0	TAC TONDORDE	2690. # 474. 936.		20		Z Q		20		20		20
	UA IF		SREF LREF BPEF SCALE										

TABULATED SOURCE DATA - CA23B

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TO THE PERSON OF		C DATA	000 STAB \$ 5.000 .000 ELEVON \$ 5.000 8.000 A. S.				46 10.00000 05 12.00000 05 1.00000	1 8C 100 C1 0 (110HN#)	4	,	.000 STAB = -1.000 .000 ELEVON = 5.000	MACH .	
747/1 AT1 0251 (ORBITER DATA)		Č	BELA BUDDER 10RB 10Y	-5.00/ 5.00		DCY DCYN .0002500017	7 .0018900047 .00046 1 .002040008600005 7 .000450001700005	747/1 ATI 02SI (ORBITER DATA)			BETA BRUDGER BIORR BIORR	* \A	
ARC 14-120(CA23B) 747/1 A1		Z	. 0000 IN. 70 375.0000 IN. 20	RN/L = 3.32 GRADIENT INTERVAL		0CD 00051		ARC 14-120(CA23B) 747/1 AT		2	375.0000 IN. 70		
	REFERENCE DATA	- 2690.0000 SQ.FT.	LREF = 474.8100 IN. YMRP = BREF = 936.6800 IN. ZMRP = SCALE = .0125		DZ = 50.000	AL PHAC . 000	GRADIENT GRADIENT		REFERENCE DATA	* 2690,0000 Sp.FT.	LREF # 474.8100 IN. YMRP # BREF # 936.6800 IN. ZMRP # SCALE # 0.36	,	

ACH ALPHAO 4.00000 6.00000 8.00000 ALPHAO 4.00000 6.00000 8.00000 .000 DCBL .00088 .00077 .00073 . 00094 . 00094 . 00094 . 00094 Š .00011 .00021 .00021 DCYN .00018 .00012 .00027 5.00 5.00 3.34 GRADIENT INTERVAL = -5.00/ -5.00/ .00097 .00097 .00097 00100 .00109 .00094 .00145 RN/L = 3.35 GRADIENT INTERVAL DCLM .01256 .01210 .01181 DCLM .00992 .00961 .00934 DCD -.00668 -.01038 -.01480 DCD -.00641 -.00940 -.01352 DCL -.03110 -.07298 -.11267 -.02039 DCL -.02509 -.06533 -.10474 -.01991 3.500 ALPHAC .000 2.000 4.000 GRADIENT 7.500 ALPHAC .000 2.000 4.000 GRADIENT

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TABULATED SOURCE DATA - CA23B	
23 MAR 76	

MAR 75		TABULATED	SOURCE DATA	A - CA23B								603
			ARC 14-18	14-120(CA23B)	747/1 AT1 02	O2S1 (ORBITER	DATA)		(110HN+)	(17	7 OCT	75
REFERENCE DATA	Q 33	ATA						PAR,	PARAMETRIC	DATA		
2690.0000 SQ 474.8100 IN 936.6800 IN	ř.	XMRP *	1109.0000 .0000 375.0000	1N. 2000 70. 2000			BETA RUDDE TORB DY	8 8 8 H	00000	STAB ELEVON DX MACH		5.000 5.000 .000
			RN/L = 3	.35 GRADIENT	IENT INTERVAL	5.00/	5.00					
20	41	10.300 ALPHAC .000 2.000 4.000 GRADIENT	DCL 02427 06189 10168	000 00605 00874 01283	DCLM .00855 .00846 .00841	00158 .00158 .00101 .00089	DCYN .00023 .00015 .00016	DCBL .00071 .00073 .00063	ALPHAO 4.00000 6.00000 8.00000	00000		
			RN/L = 3	.35 GRADIENT	IENT INTERVAL	L = -5.00/	5.00					
20	•	15.000 ALPHAC .000 2.000 4.000 GRADIENT	DCL 02206 05725 09394 01795	000 00498 00765 01142	DCLM .00587 .00711 .00775	. 00073 . 00116 . 00016 . 00075	00007 .00027 .00025 .00021	1800 . 00053 . 00053 . 00059	ALPHAO 4.00000 6.00000 9.00000	000000 0000000000000000000000000000000		
			RN/L = 3	S.35 GRADIENT	IENT INTERVAL	L = -5.00/	5.00					
2 0		30.000 ALPHAC .000 2.000 4.000 GRADIENT	DCL 01858 04517 07081	DCD -, 00359 -, 00779 -, 00755	DCLM .00465 .00537 .00645	DCY .00062 .00019 .00044 .000044	00000: 60000: 20000:	DCBL .00021 .00031 .00028	ALPHAO 4.00000 6.00000 8.00000	0000 0000 0000		
			RN/L = 3	3.34 GRAD	GRADIENT INTERVAL	1 = -5.00/	5.00					
2 0	H	45.000 ALPHAC .000 2.000 4.000 GRADIENT	000 -,01353 -,03186 -,04693 -,06835	DCD 00214 00325 00481	00.336 .00336 .00450 .00565	00017 .00017 .00016 .00100	DCYN 00003 00004.	DCBL .00017 .000527 .000629	₹ ÷ w œ ∸	ALPHAO .00000 .000000 .000000		
			RN/L =	3.33 GRAD	GRADIENT INTERVAL	ור • -5.00/	5.00					
20		50.000 ALPHAC .000 2.000 4.000 GRADIENT	DCL 01203 02703 03915 00678	000 00158 00284 00584 00000	M. 170 . 005-94 . 005-27 . 005-44 . 00663	DCY . 00307 . 00542 . 00123	00000. - 00000. - 00000.	008L .0001B .00028 .00029	₹ 000~	AL PHAO .00000 .00000 .00000 .00000		

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	(4NH013) (17 0CT	PARAMETRIC DATA	.000 STAB000 ELEVON	E De		ALPHAQ 6.00000 8.00000 10.00000			ALPHAO 6.00000 8.00000			ALPHAO 6.00000 8.00000 10.00000		ALPHAO 6.00000 8.00000 10.00000		AL PHAO 6.0000 9.00000 10.00000
		PAR	BETA RUDDER TORB TORB			DCBL .00121 .00117			.00112 .00100 .00136			DCBL .00093 .00087 .00121		DCBL .00079 .00107 .00107		DCBL .00029 .00045 .00076
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02S1 (0RB) (FB				5 00,	ר	000 .00016 .00015 .00021	5.00/	1	.00014 .00031 00013	-5.007		.000339 00037 00031	- 5.00/	0000- 00026 0005- 0009.	-5.00/	DC? 00021 00058 .00058 .00081
747/1 AT1 C				ENT INTERVAL		DCLM . 01230 . 01296 . 01624 . 00099	ENT INTERVAL		DCLM .00929 .01031 .01339	INT INTERVAL	l	DCLM .00856 .00974 .01266	NT INTERVAL	FCLM .00738 .00816 .01104	INTERVAL	.00574 .00574 .00591 .00307
-120(CA23B)			Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	.33 GRADIENT		DCD 00553 00916 01689	.32 GRADIENT		000 -,00528 -,00872 -,01562 -,00259	32 GRADIENT		DCD -,00502 -,00858 -,01519 -,0054	32 GRADIENT	DCD -,00443 -,00726 -,01362	33 GRADIENT	.00297 00297 00516 00359
APC 14-		0000		RN/L = 3		DCL 01616 05960 10887 02318	RN/L = 3	ć	01810 01810 10192 02095	RN/L = 3.		DCL 01727 05713 09976 02062	RN/L = 3.	JCL 01726 055484 09540	RN/L = 3.	DCL 01261 04090 07405
	REFERENCE DATA	30.FT. XMRP .	IN. YMAP IN. ZMAP R		3.500	ALFHAC .000 2.000 4.000 GRADIENT		7.500	CRADIENT		10.000	ALPHAC - 000 - 000 - 000 - 000 GRAD E-11		* 15.000 ALFHAC .000 2.000 4.000 GRADIENT		30.000 ALPHAC .000 2.000 4.000 GRADIENT
	REFER		474.8100 936.6800 .0125		Z 0			20			20			2 0		2 0
			LMEF # BREF # SCALE #													

DATE 23 MAR 76	MAR 76	TABULATED	SOURCE DATA	- CA238						PAGE 605	SC.
			ARC 14-12	-120(CA238) 7	747/1 AT1 02	O251 CORBITER	DATA		(4NH013)	(17 OCT 75	-
	REFERENCE DATA	1TA						PARA	PARAMETRIC DATA		
SREF # LREF # BPEF # SCALE #	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.	X X X X X X X X X X X X X X X X X X X	1109.0001 10000 375.0000	IN. X0 IN. Y0 IN. Z0			BETA RUDDER TORB DY		.000 STAB .000 ELEVON 6.000 DX .000 MACH	000.22 0000.	8888
			RN/L = 3.	3.33 GRADIENT	INT INTERVAL	-5.007	5.00				
	2 0	45.000 ALPHAC .000 2.000 4.000 GRADIENT	DCL 01131 03679 01832	000 -,00214 -,00666 -,00666	00511 00511 00519 00748	DCY 00064 00016 .00033	DCYN 00008 000016 00016	DCBL .00052 .00063	ALPHAO 6.00000 8.00000 10.00000		
			RN/L = 3.	.32 GRADIENT	ENT INTERVAL	. = -5.00/	5.00				
	• 20	50.000 ALPHAC .000 2.000 4.000 GRADIENT	DCL 01202 02751 05121 0990	000 - 00148 - 00594 - 00552 - 00094	MJD0 . 00989 . 44400 . 44400	DCY 00048 .00001 .00053	DCYN 00005 00013 00013	DCBL .00052 .00061 .00076	ALPHAO 6.00000 8.00000 10.00000		
			ARC 14-18	ARC 14-120(CA23B)	747/1 AT1 08	O2S1 (ORBITER	DATA		(4NH020)	27 120 TI	_
	REFERENCE DATA	ATA						PAR	PARAMETRIC DATA		
SREF # LREF # BREF # SCALE #	2690.0000 SO.FT. 474.8100 IN. 936.6800 IN. .0125	XMRP #	1109.0000 0000 375.0000	N. X0 N. X0 N. X0			BETA PUDDER 1 ORB DY	и м н н Ос.	.000 STAB .000 ELEVON 4.000 DX .000 MACH		5.000 .000 .000 .600
			RN/1 = 3	.32 GRAD!	GRADIENT INTERVAL	5.00/	5.00				
	. 20	3.500 ALPHAC .000 2.000 4.000 GRADIENT	DCL 00990 05960 02517	000 00368 00757 0116-	DCLM .01292 .01215 .01000	7000. - 0000. - 0003. - 1000.	0000. 10000. 10000. 10000.	DCBL .00055 .00065 .00052	ALPHAO 4.00000 6.00000 8.00000		

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	(484020)		PARAMETRIC DATA	.000 STAB .000 ELEVON 4.000 DX	HOAM DOO.	AL PHAO 4.00000 6.00000	000000		ALPHAO 4.00000 6.00000 8.00000		ALPHAO 4.00000 6.00000 8.00000	1	AL FHAO 4,00000 6,00000 8,00000 1,00000	:	AL PHAO 4.00000 6.00000 8.00000
		ž	¥ 1	BETA RUDDER ICRB	•	DCBL .00042 .00066	10000 -		DCBL .00020 .00039 .00039		DCBL .00007 .00047 .00035		0CBL -,00001 -,00039 -,00005		00015 - 000015 - 000032 - 000033
	R DATA)			BETA PUODE ICRB	יר כ	1 1	.0000	5.00	00000 000000 0000000000000000000000000	5.00	DCYN -,06007 -,06006 -,09006	5.00	DCYN 60013 60013 60013	5.00	ပြင်းစုံပုံရှိ
	0251 (ORBITER				L = -5.00/	2000	.00026	. * -5.00/	00043 .00063 .00061	5.00/	DCY 00014 00026 00019 00001	-5.00/	007 00052 00124 00063	5.00/	C C C C C C C C C C C C C C C C C C C C
	747/1 ATI (GRADIENT INTERVAL	DCLM .01037 .00941	30060	ENT INTERVAL	#5000:- \$6900: 11600: 11600:-	INT INTERVAL	DCLM . 00723 . 00705 . 00705 . 0000.	NT INTERVAL	DCLM . 00493 . 00493 . 00008	NT INTERVAL	00083 .00283 .00346 .00346 .000.
IA - CA23B	14-120 (CA239)		2		3.32 GRAD!	00308	3	.32 GRADIENT	DCD 00.258 010.39 010.39	.30 CRADIENT	000 - 100 -	.30 GRADIENT	DCD 00057 00301 95572 00129	.30 GRADIENT	DCD - 00001 - 00130 - 00096
שטטער	ARC 14-		0000	375.0000	RN/L = 3	.00074 .05794 .09170		RN/L = 3	DCL .00048 05070 08958	RN/L = 3	DCL . 00138 04746 09176 02056	RN/L = 3.	000055 -, 03972 -, 03972 -, 03972 -, 04972	RN/L = 3.	DCT - 03308 - 03308 - 03308 - 01040
י אפטראי בט		DATA	adwx.	YMRP *		7.500 ALPHAC 000 2.000 4.000 GRADIENI))		10.000 ALPHAC ,000 2.000 4.000 GRADIENT		15.000 ALPHAC .000 2.000 4.000 GRADIENI		30.000 ALFHAC .000 2.000 4.000 GRAD;ENT		45.000 ALFHAC .000 P.000 P.000 CRADIENT
		REFERENCE DATA	3 SQ.FT	zz Zz	•	•			•		•		•		•
1		7E F.	2690.0000	474.8100 935.6800 .0125		20		i	70		2 0		Z 0		20
				LREF BREF SCALE											

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		ARC 14-120	14-120(CA23B) 7	747/1 ATI 0251	SI (ORBITER	DATA)	₹	(4NH020) (17 OCT	(22)
BEEFRENCE DATA	ATA						PARAMETRIC	RIC DATA	
SREF = 2690.0000 50.FT. LREF = 474.8100 IN. BDEF = 936.6800 IN.	XMRP YMRP ZMRP	N1 0000.0011 N1 0000.	0000 X X X			BETA RUDDER 1048 DY	0000.	00 STAB • 00 ELEVON • 00 DX • 00 MACH • 00 MACH	5 000 000 600
t .d		RN/L = 3.29		GRADIENT INTERVAL	-5.00/	5.00			
• 20	50,000 ALPHAC .000 2,000 4,000 GRADIENT	DCL 00255 03184 04729 01119	DCD .00006 00161 00326	DCLM .00238 .00328 .00328		DCYN 00018 00008 00010	OCBL .00023 .00032 .00012	AL PHAO 4.00000 6.00000 8.00000	
		ARC 14-1201CA23B)		00 11 1/747	0251 (ORB11ER	DATAI	ž	(4NH021) (17 OCT	T 75)
4 + 4 C P C A P C	***						PARAME TRIC	TRIC DATA	
SREF = 2690.0000 SQ.FT LREF = 474.8100 IN. BREF = 936.6800 IN. CCALF = 0.0125	XMRP * ZMRP *	1 0000.0011 1 0000. 1 0000.375	12. 12. 12. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13			BETA RUDDER 10RB DY	<i>3</i>	.000 STAB000 ELEVON000 DX	0000.
		RN/L = 3.	3.34 GRADIENT	ENT INTERVAL	5.00/	5.00			
• 20	3.500 ALPHAC .000 2.000 4.000 GRADIENI	DCL -, 01390 -, 65894 -, 09467 -, 02019	0CD 00559 00915 01290	DCLM .01421 .01362 .01180	. 00001 . 00007 . 00027 . 00001	DCYN 00003 .00009 .000011	DCBL .00054 .00074 .00049	ALPHAO 4.00000 6.00000 9.00000	
		RN/L = 3	.33	GRADIENT INTERVAL	/00·51	5.00			
• 20	7.500 ALPHAC .000 2.000 4.000 GRADIENT	DCL -, 01539 -, 05556 -, 09067 -, 01692	DCD 00517 00844 01213	DCLM .01133 .01105 .00958	. 00060 - 00005 - 00010	DCYN . 00008 . 00009 . 00009	DCBL .00032 .00072 .00038	ALPHAO 4.00000 6.00000 8.00000 1.00000	

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		(4NH022)	PARAMETRIC DATA	.000 STAB .000 ELEVON 8.000 DX		ALPHAO 8.00000 10.00000 12.00000		AL PHAO B. 00000	1.00000 1.00000 1.00000		METRIC DATA .000 STAB .000 ELEVON .000 DX .000 MACH		ALPHAO 6.00000 8.00000 10.00000
			PA	BETA RRUDDER R 10RB R		DCBL .00004 .00014 .00035		008L .00012	30000.	d	инян С		DCBL .00096 .00055 .00038
	1	ORBITER DATA)		B 100 7.0	5.00	DCYN 00016 00013	ָּהָ בּ	DCYN 00005 00012	_		BETA RUDDER 10RB DY	5.00	DCYN 00000. -00000.
	1000				L = -5.00/	DC? 00135 00116 .00018		DCY 00113 00115	.00039 0251 (ORBITER			-5.007	DCY 00030 00023 .00031
	, 144 1/CMC	- -			GRADIENT INTERVAL	DCLM .00428 .00603 .01021	ENT INTERVAL	DCLM .00380 .00546	.00138 50 174 1/747			NT INTERVAL	DCLM . 01262 . 01243 . 01548
TA - CA238	14-120(CA23B)		:	X X X X X X X X X X X X X X X X X X X	3.31 GRADI	000 - 00090 - 00258 - 00851	.31 GRADIENT	DCD 00074 00226 00823			N X X X X X X X X X X X X X X X X X X X	31 GRADIENT	DCD 00474 00770 01276
J SOURCE DATA	ARC 14-		0	0000. 0000. 375.	RN/L = 3	DCL 00334 01757 03564 00808	RN/L = 3	DCL 00467 01871	. uu		1109.00011 10000. 375.0000	RN/L = 3.	DCL 00012 04316 08094 02020
ABOLATED		DATA		YMRP		45.000 ALPHAC .000 2.000 4.000 GRAUIENT		50.000 ALPHAC .000 2.000 4.000		ITA	XMRP YMRP *	1	3.500 ALPHAC .000 2.000 4.000 GRADIENT
2		REFERENCE DATA	2690.0000 SO FT	474.8100 IN. 936.6800 IN. 0125	ļ	• 2g		• 20		MENERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		70
				CALE							SPEP BREF SCALE E		

80	76 REFER		TABULATED DATA	<u>u</u>	- CA238	1747/1 ATI 0251	SI (ORBITER	DATAI	PARAI	23) (17 C DATA	7 4
SREF = 28 LREF = 1 BREF = 1 SCALE = 1	2590.0000 50 474.8100 1N 935.5800 1N		XMRP YMRP ZMRP	00000	222 			RUDDER LORB DY	. B # H	3	000.
OF OF	20	•	7.500 ALPHAC .000 2.000 4.000 GRADIENT	MN/L = 5. DCL 00121 07808 07808	DCD004530074600185	DCLM 953 .01017 746 .01039 191 .01288 185 .00058	DCY 00043 00036 00028	00001 000001 000005	DCBL .00071 .00045 .00025	ALPHAO 6.00000 8.00000 10.00000	
IG:				RN/L = 3.	.31 GRADIENT	NT INTERVAL	-5.007	5.00			
INAL PAG OOR QUAL	Z 0	и	10.000 ALPHAC .000 2.000 4.000 GRADIENT	DCL 00301 04226 07382	DCD 00431 00714 01127	DCLM .00905 .00931 .01232	DCY 00067 00007 00005	\$0000. \$0000.	DCBL .00072 .00026 .00020	ALPHAO 6.00000 8.00000 10.00000	
e I				RN/L = 3	.31 GRADIENT	INT INTERVAL	-5.007	5.00			
8 7 .	20	•	15.000 ALPHAC .000 2.000 4.000 GRADIENT	DCL 00405 03440 07083	.00374 00374 00616 01012	DCLM .00768 .00928 .01106	DCY 00061 00071 00008	DCYN .00003 00007	DCBL .00074 .00017 .000179	ALPHAO 6.00000 8.00000 10.00000	
				RN/L = 3	1.31 GRADIENT	ENT INTERVAL	5.00/	5 .00			
	20	•	30.000 ALPHAC .000 2.000 4.000 GRADIENT	DCL 00488 03401 05205	DCD 00254 00431 00625	00531 .00531 .00608 .00895	DCY 00105 00074 00034	00000. - 00000. - 00000.	DCBL .00055 .00019 .00010	AL PHAO 6.00000 8.00000 10.00000	
				RN/L = 3	3.3! GRADIENT	ENT INTERVAL	-5.007	5.00			
	20	•	45.000 ALPHAC .000 2.000 4.000 GRAD:ENT	DCL 00580 03988 03952	DCD 00155 00282 00390	00403 .00403 .00483 .00718		NY20 - 00018 - 00019 - 00019	DCBL .000056 .00026 .00026	AL PHAO 6. 00000 8. 00000 10.00000	

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			ARC 14-	14-120(CA23B)	747/1 AT1 0	0251 (ORB11ER	R DATA)		(4NH023)	17 001	i,
	REFERENCE DATA	DATA						040	TYC DIGITUME TO THE		
SREF = LREF = BREF = SCALE =	2690.0000 SO.F1 474.8100 IN. 936.6300 IN.	T. XMRP ZMRP	1109,0000 .0000 375,0000	N. X.			BETA RUDDER IORB DY	# # # # @:		STAB # ELEVON # MACH #	5.000 .000 .000 .000
			RN/L	3.31 GRAD	GRADIENT INTERVAL		5.00				
	• 20	50.000 ALPHAC .000 Z.000 H.000 GRADIENT	DCL 00771 02544 03749	0CD 00113 00237 00310	DCLM .00376 .00473 .10603.	00155 00123 00116	DCYN 00015 00012	DCBL .00060 .00019 .00039	ALPHAO 6.00000 8.00000 10.00000		
			ARC 14-1	14-120(CA238)	747/1 ATI 08	0251 (ORBITER	DATA		(+20HN+)	(17 OCT	1 75
	REFERENCE DATA	DATA						7040	ATAC CIGTOMACA		
SREF # LREF # BREF # SCALE #	2690,0000 SQ.FT 474.81C0 IN. 936,6820 IN.	XMRP YMRP	1109.0000 .0000 375.0000	10. 70 10. 70 10. 70			BETA RUDDER 10RB DY			STAB ELEVON BOX	000.1-
			RN/L = 3	3.34 GRAD!	GRADIENT INTERVAL	-5.00/	5.00				
	• 20	3,500 ALPHAC .000 2.000 4.000 6RAD :ENT	000 00455 0439! 08318	DCD -, 00580 -, 00914 -, 01436	DCLM .01270 .01304 .01580	0003 0000 00003 00000	DCYN 03000- -00010 .00010	DCBL .00066 .00044 .00026	AL PHAO 6.00000 8.00000 10.00000		
			RN/L = 3	.33 GRADIENT	ENT INTERVAL	-5.00/	5.00				
	. 20	7.500 ALPHAC .000 2.000 H.000 GRADIENT	DCL 06370 04355 07948	DCD 00549 00857 01316	0000 .01069 .01054 .01355	\$1000°- \$4000°- \$1000°-	00001 .00001 .00013	DCBL .00063 .00041 .00017	ALPHAO 6.00000 8.00000 10.00000		

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			ARC 14-12	14-120(CA23B)	747/1 ATI 0251	51 (ORBITER	DATAI		(HZOHNH)	(17 OCT	(27 T
REFERENCE DATA	Q Q	TA.						PARA	PARAMETRIC DATA	<	
2690,0000 SQ.F1 474.8100 IN. 936,6800 IN.	, .	# # # #	1 000.00011 1 0000. 375.0000	2002 2007 2007 2007			BETA RUDDEI 10RB DY	φ 4 + + + α	0000	STAB ELEVON DX	000.
			RN/L = 3.	.33 GRADIENT	ENT INTERVAL	-5.00/	5.00				
20		10.000 ALPHAC .000 2.000 4.000 GRADIENT	DCL -,00469 -,04223 -,07895	0CD -, 00511 -, 00824 -, 01273	DCLM .00970 .01015 .01267	00016 -,00016 -,00016 -,00018	£0000. £0000. £0000.	DCBL .00973 .00037 .00011	ALPHAO 6.00000 8.00000 10.00000		
			RN/L = 3	. 32 GRADIENT	ENT INTERVAL	-5.00 /	5.00				
20	•	15.000 ALPHAC .000 2.000 4.000 GRADIENT	04183 07190 07190	000 00450 00756 01141	DCLM .00793 .00853 .01141	DCY 00057 00066 .00066	#1000 #1000	00082 .00019 00008	ALPHAO 6.00000 8.00000 10.00000		
			RN/L = 3	34 GRADIENT	ENT INTERVAL	. = -5.007	5.00				
20		30.000 ALPHAC .000 2.000 4.000 GRADIENT	DCL 00391 03158 65311	000 00281 00492 00709	DCLM .00563 .00654 .00919	DCY 00088 00018 00018	00000.	DCBL0003400008	ALPHAO 6.00000 8.00000 10.00000		
			PN/L = 3	3.32 GRADIENT	IENT INTERVAL	-5.007	5.00				
20	•	45.000 ALPHAC .000 2.000 4.000 GRADIENT	DCL C0627 02550 04161	000 00167 00314 00061	DCLM .00412 .03506 .03695	DCY 00167 00119 00054	-, 00019 -, 00019 -, 00021 -, 00003	DCBL .00037 00013 .00006	ALPHAO 6.00000 8.00000 10.00000		
			PN/L = 3	3.32 GRAD	GRADIENT INTERVAL	L = -5.00/	5.00				
20	•	50.000 ALPHAC .000 P.000 H.000 GRADIENT	DCL 00442 02308 03920 03972	DCD 00135 00280 00417 00070	00.482 .00382 .00476 .00635	DCY 06150 00098 00112	500022 000022 00017 00003	DCBL .00021 .00010 .00013	ALPHAO 6.00000 8.00000 10.00000	00000	

TABULATED SOURCE DATA - CA238

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7 12			-1.000 .000 .000 .000											
C C C C C C C C C C C C C C C C C C C		RIC DATA	STAB 100 ELEVON 100 DX MACH 1100 DX		AL PHAO B.00000 C.00000 E.00000	1 	ALPHAO 8.00000 10.00000 12.00000		ALPHAO 8.00000 10.00000 12.00000		ALPHAO B.00000 10.00000 12.00000			ALPHAO 3.00000 0.00000 0.00000
į		PAKAME IKI			DCBL .00066 8 .00063 10 .00010 12		DCBL . 00029 . 8 . 00036 . 10		DCBL		DCBL00009 800020 1000027 12			DCBL
DATA			BETA RUDDER 10RB 0Y	5.00	0CYN .00027 .00021 .00011	5.00	00008 .00008 .000011 .000009	5.00	00004 00003 00003 000025 000094	5.00	DC N DC O O O O O O O O O O O O O O O O O O	5.00		DCYN DC 000080 .00003 .0
0251 CORBITER			·	-5.007	.00112 .00041 .00069 00061	-5.00/	.00038 .00038 .00003 .00081	-5.007	DCY 00034 00041 .0101.	-5.00/	7.00 6.00 6.00 6.00 7.00 7.00 7.00 7.00	-5.00/		DCY 00046 00021 .00018
747/1 AT1 0				ENT INTERVAL	ОСLМ .01166 .01319 .01907	INT INTERVAL	DCLM .01026 .01152 .01760	INT INTERVAL	DCLM . 00922 . 01002 . 01649	NT INTERVAL	17510. 19600. 19600. 19600.	NT INTERVAL		DCLM .00561 .00737 .01236
14-120(CA23B)			000 0 	.34 GRADIENT	DCD -,00649 -,00925 -,02540	.33 GRADIENT	000 -,00586 -,00904 -,02277	.33 GRADIENT	DCD 00549 00903 02072	32 GRADIENT	DCD 00486 00804 01956	34 GRADIENT		DCD 00305 00529 01372
ARC 14-1		000	375.0000	RN/L * 3	DCL 00409 03293 09379 02242	RN/L = 3	DCL -, 00389 -, 03787 -, 09575 -, 09047	RN/L = 3	DCL 00316 04327 07980 01916	RN/L = 3.	DCL 00537 03619 07486	RN/L = 3.		DCL 00463 03011 05592 01282
	DATA		YARP YARP ZARP		3.500 ALPHAC .000 2.000 4.000 GRADIENT		7.500 ALPHAC .000 2.000 4.000 GRADIENT		10.000 ALPHAC .000 2.000 4.000 GRADIENT		15.000 ALPHAC .000 2.000 H.000 GRADIENT		30.000	ALPHAC .000 2.000 4.000 GRADIENT
	REFERENCE DATA	₹ 2690.	474.8100 IN.		• ZO		• 20		* ZQ		• 20		2 0	

510	. 755 .		-1.000 .000 .000 .600		·			1 25 1		.000 .000 .000 .000		
PAGE	(4NH025) (17 OCT	PARAMETRIC DATA	.000 STAB000 ELEVON 8.000 DX		ALPHAO 8.00000 10.00000 12.00000		AL PHAO 7 8.00000 7 10.00000 2 12.00000	(4NH027) (17 OCT	PARAMETRIC DATA	.000 STAB000 ELEVON B.000 DX		ALPHAO 8 8.00000 2 10.00000 9 12.00000
		PA	A DER B B B B		DCBL .00002 .00003 .00055		DCBL .00027 .00017 .00042		Ġ.	BETA RUDDER RIORB ROPY		DCBL .00018 .00022 .00049
	P DATA		BETA RUDDEF 10RB DY	3.00	DCYN - 00009 - 00005 - 00005 - 00005	5.00	DCYN 00010 00007 00026	R DATA		BETA RUDDE IORB DY	2.00	DCYN .00036 .00123 00009
	O2S1 (ORBLIER			L = -5.00/	0CY 00070 00052 00013	L = -5.00/	DCY 90119 00067 00035	0351 (ORBITER			4L = -5.00/	0CY .00033 .00332 .00238
	747/1 AT1 0			ENT INTERVAL	00386 .00386 .00562 .01005	ENT INTERVAL	DCLM .00328 .00530 .00533	747/1 AT1 (GRADIENT INTERVAL	DCLM . 01424 . 01458 . 02560
A - CA23B	14-120(CA23B)		Z X X X X X X X X X X X X X X X X X X X	3.32 GRADIENT	DCD 00198 00349 01004	3.32 GRADIENT	DCD 00158 00272 00927	ARC 14-120(CA238)		X X X X X X X X X X X X X X X X X X X	3.29 GRAD	DCD 00350 00693 02118
SOURCE DATA	ARC 14-1		. 0000 . 0000 375. 0000	RN/L = 3	DCL 00564 02192 04025	ה אירויש האירויש	DCL 00508 01849 03715	ARC 14-		0000.00011 .0000 375.0000	RN/L =	DCL 01!51 04437 03157
TABULATED		ATA	XMAP YMRP ZMRP		45.000 ALPHAC .000 2.000 4.000 GRADIENT		50.000 ALPHAC .000 2.000 4.000 GRADIENT		DATA	XMRP * ZMRP *		3.500 ALPHAC .000 2.000 4.000 GRADIENT
MAR 76		REFERENCE DATA	2690.0000 SO.FT. 474.8100 IN. 936.6800 IN.		2 0		* 20		REFERENCE DATA	2690.0000 SQ.FT 474.8100 IN. 936.6900 IN. 0125		2 0
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	30 L.) (LZ0HN+)	PARAMETRIC DATA	STA ELE GX GAG		AL PHAO B.00000 10.00000 12.00000	-	AL PHAO 8.00000 10.00000 12.00000		ALPHAO 8.00000 10.00000 12.00000 1.00000		AL PHAO B.00000 10.00000 12.00000 1.00000		ALPHAO B.00000 10.00000 I.000000 1.00000
		PAR	* * * *		00005 .00005 .00045 .00034		DCBL 00003 .00072 .00024		DCBL 00029 .00026 .00017		008L 00050 .00024 .00018		DCBL 00072 00016 .00037
	R DATA)		BE 1A RUDDE 10RB DY	5.00	Ω	5.00	- Δ	5.00	DCYN - 00002 - 00007 - 00041	5.00	DCYN .00009. .00006- .00026	5.00	00010 - 00010 - 000010 - 00001 - 00008
	03S1 (ORBITER			L = -5.00/	DCY .00150 .00234 .00282	L = -5.00/	007 9828 901.29 90828 90838	5.00/	700 .00254 .00426 .0048	5.00/	. 00 252 . 00 196 . 00 362 . 00 027	-5.00/	DCY .00162 .00215 .00255 .00253
	747/1 AT1 C			ENT INTERVAL	DCLM .01161 .01262 .01871	DIENT INTERVAL	DCLM . 00938 . 01024 . 01558	INT INTERVAL	DCLM .00780 .00925 .01443	NT INTERVAL	FCLM .00443 .00598 .01147	NT INTERVAL	.00511 .00511 .00587 .01044
TA - CA23B	-120 (CA23B)		0000 10. X0 10. X0	.29 GRADIENT	DCD 00359 00699 02041	.29 GRA	DCD 00346 00884 01993	.29 GRADIENT	000 00422 00739 01880	.29 GRADIENT	DCD 00218 00447 01355	30 GRADIENT	DCD 00129 00254 00962
SOURCE DATA	ARC 14-		1109.0000 .0000 375.0000	RN/L = 3	DCL 01254 04592 08851 01899	RN/L = 3	0CL 01240 04638 08702	RN/L = 3	DCL 01634 04700 08152	RN/L = 3.	DCL -,01080 -,03596 -,06027	RN/L = 3,	DCL .00026 02078 04148
TABULATED		DATA	XMRP YMRP ZMRP ZMRP		7.500 ALPHAC .000 2.000 4.000 GRADIENT		10.000 ALPHAC .000 2.000 4.000 GRADIENT		15.000 ALPHAC .000 Z.000 H.000 GRADIENT		30.000 ALPHAC .000 2.000 4.000 GRADIENT		45.203 ALPHAC .000 2.000 4.000 GRADIENT
1AR 76		REFERENCE DATA	2590.0000 SO.FT 474.8100 IN. 935.6800 IN.		• ZQ		• 20		, 20		• 2 0		• 20
UAIE 23 MAR			SREF "LREF" BREF "SCALE"										

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	CA23B
	23 MAR 76

CATE 23 MAR 76	TABULATED	TABULATED SOURCE DATA	- CA23B					_	PAGE 617
		APC 14-12	ARC 14-120(CA23B) 7	747/1 ATI 0351	SI (ORBITER	DATA)		(1) (L2DHN+)	OCT 75 1
REFERENCE DATA	DATA						PARA	PARAMETRIC DATA	
SPEF = 2690.0000 SQ.FT LREF = 474.8100 IN. BREF = 936.6800 IN. SCALE = .0125	XMRP = ZMRP =	1 109.0000 1 0000 375.0000	IN. X0 IN. Y0 IN. Z0			BETA RUDDER 10RB DY		.000 STAB .000 ELEVON 8.000 DX	5.000 .000 .600
		RN/L = 3	.30 GRADIENT	INT INTERVAL	-5.00/	5.00			
* 20	50.000 ALPHAC .000 2.000 4.000 GRADIENT	DCL 00294 01945 63623 0863	DCD 00122 00228 00832	DCLM .00403 .0019 .01019	00187 .00187 .00259 .00009	00007 .00007 .00003 .00033	DCBL 00076 00014 .00052	ALPHAO 8,00000 10,00000 12,00000 1,00000	
		ARC 14-1	ARC 14-120(CA238) 7	747/1 AT1 03	03S1 (ORBITER	: DATA)		(480H034)	17 OCT 75 1
REFERENCE DATA	DATA						PAR	PARAMETRIC DATA	
SREF = 2690.0000 SQ.F1 LREF = 474.8100 IN. BREF = 936.6800 IN. SCALE = .0125	T. KMRP # YMRP # ZMRP #	1109.0000 .0000 375.0000	IN. X0 IN. Y0 IN. Z0			BETA RUDDE 10RB DY	11 11 11 11 OC UJ	.000 STAB 6.000 DX 6.000 DX	5.000 .000 .000 .000
		RN/L . 3	. 29 GRADIENT	ENT INTERVAL	-5.00/	5.00			
. 20	3.500 ALPHAC 000 2.000 4.000 GRAD!ENT	0CL 01786 05470 10183	000 -,00546 -,00908 -,00908 -,00936	DCLM .01903 .01713 .01916	00.4 .00332 .00371 .00367	DCYN - 00007 .00018 .0004	00056 .00016 .00018 00010	AL PHAO 6.00000 8.00000 10.00000 1.00000	
		RN/L = 14	3.29 GRADIENT	ENT INTERVAL	-5.007	5.00			
Z 0	7.500 ALPHAC .000 2.000 4.000 GRAD!ENT	DCL 01641 09435 09435	DCD 00498 00832 01389	DCLM .01416 .01250 .01484	DCY .00332 .00314 .00294 00039	7.000.1 7.0000.1 7.00008.0	DCBL .00018 .00002 .00012	AL PHAO 6.00000 8.00000 10.00000	

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SREF LREF BREF SCALE

MAR 76	TABULATE	ATEC	D SOURCE DATA	1A - CA23B						S. S.	æ
			ARC 14-120	120 (CA23B)	747/1 AT1 0	03S1 (0RB) TER	R DATA)		(+KDH03+)	1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	_
REFERENCE DATA	DATA							PAR	PARAMETRIC DATA	;	•
2690.0000 50.F 474.8100 1N. 935.6800 IN.	T. XMRP YMBP ZMRP		1109.0000 .0000 375.0000	N. XO N. XO 1N. XO			BETA RUDDEI 10RB DY	* * # #	. ∾m ⊡ Σ	TAB # 5.000 LEVON * .000 X	8888
			RN/L = 3	3.29 GRADIENT	ENT INTERVAL	L = -5.00/	5.00				
. 20	* 10.000 ALPHAC .050 2.050 4.000 SRADIENT	A0005	DCL 01663 05337 09114 01863	000 -,00514 -,01320 -,00201	DCLM .01181 .01022 .01322	DCY . 00282 . 09308 . 00278 - 00001	DCYN 00019 00006 00015	DCBL 00002 00002 .00002	ALPHAO 6.00000 8.00000 10.00000		
			RN/L = 3	3.29 GRADIENT	ENT INTERVAL	5.007	5.00				
. Z0	15.000 ALPHAC .000 2.000 4.000 GRADIENT	28885	DCL 01736 05103 08662	DCD 00449 00746 01206	DCLM .00851 .01048	, 00243 , 00243 , 00309 , 00000	000 - 5 000 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DCBL 00011 00018 .00009	ALPHAO 6.00000 9.00000 10.00000		
			RN/L = 3	3.29 GRADIENT	ENT INTERVAL	. = -5.00/	5.00				
. 20	30.000 ALPHAC 000 2.000 4.000 GRAD:EVT	<u> </u>	DCL . 01202 - 03756 - 06493	DCD 00293 00503 00813	DCLM .00625 .00652 .00675	DCY .06237 .05307 .5550 .50307	DCYN 00038 00000 00025	0CBL 00055 00047 90011	AL PHAO 6.00000 8.00000 10.00000		
			RN/L = 3	.30 GRADIENT	ENT INTERVAL	-5.00/	5.00				
20	45.000 ALPHAC .000 2.000 4.000 6RAD:ENT	U000⊬	DCL C0847 02439 04397 00887	DCD 00262 00376 00545	DCLM .00520 .00555 .00784	00176 .00176 .00196 .00195 .00095	DCYN 00033 00028 00026	DCBL 00047 00073 .00003	ALPHAO 6.00000 8.00000 10.00000		
			RN/L = 3	.30 GRADIENT	ENT INTERVAL	-5.00/	5.00				
. 20	50.909 ALPHAC . C09 2.699 4.609 6RADIENT	0000-	0CL 00897 01920 26868 50740	000 00227 00361 00474	DCLM . 00489 . 00581 . 00783	DCY .05178 .05178 .05573 .06614	DCYN 00011 00018 00013	OCBL 00015 00071 00021	ALPHAO 6.00000 8.00000 10.00000		

619	1 27 1		5.000 .000 .600										
PAGE	(4NH035) (17 OCT	PARAMETRIC DATA	.000 STAB		ALPHAO 4.00000 6.00000 8.00000		ALPHAO 4.00000 6.00000 8.00000		AL PHAO 4.00000 6.00000 8.00000		AL PHAO 4.00000 6.00000 8.00000		ALPHAO 4.00000 6.00000 8.00000 1.00000
		PARA	, , , , , , , , , , , , , , , , , , ,		DCBL .00043 .00059 .00059		DCBL 000039 .00029 .00029		DCBL .00046 .00022 .00003		DCBL .00020 00006 .00007		DCBL .00025 00017 00017
	DATA		BETA RUDDEF 10RB DY	5.00	DCYN .00037 .00028 .00029	5.00	DCYN .00048 .00028 .00022	5.00	DCYN .00052 .00036 .00036	5.00	DCYN .00039 .00015	5.00	000055 . 000025 . 00000. . 000010
	1 CORBITER			-5.00/	00214 .00184 .00136 .00136	-5.00/	DCY .00156 .00191 .00087	-5.00/	DCY .001111 .00120 .00112	* -5.00/	007 .00077 .00096 .00090	-5.007	DCY 00011 00027 00027
	747/1 ATI 0351			UT INTERVAL	06000;-	NT INTERVAL	DCLM .01038 .01018 .00709	NT INTERVAL	DCLM . 00824 . 00800 . 00500	NT INTERVAL	DC.M .00569 .00626 .00371	INT INTERVAL	DCLM .00271 .00408 .00328
- CA238	(CA23B)		IN. X0 IN. Y0 IN. 20	29 GRADIENT	DCD 00358 00737 01132	.29 GRADIENT	DCD 003*3 00700 01043	.29 GRADIENT	000 - 00299 - 00547 - 00170	.29 GRADIENT	000 -,00241 -,00548 -,00859	.29 GRADIENT	0CD 00117 00329 00534 00534
SOURCE DATA	ARC 14-120		1 109.0000 1 1 0000 1 375.0000 1	RN/L = 3.	DCL -,02033 -,06597 -,09756	RN/L = 3.	DCL 01822 05073 09303	RN/L = 3	DCL - 01384 - 05231 - 08542 - 01790	RN/L = 3	001 - 01238 - 04890 - 08142 - 01756	RN/L = 3	.00989 .03659 .7553.
TABULATED		ıTA	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		3.500 ALPHAC .000 2.000 4.000 GRADIENT		7.500 ALPHAC .000 2.000 4.000 GRADIENT		10.000 ALPHAC .000 Z.000 4.000 GRADIENT		15.000 ALPHAC .000 2.000 4.000 GRADIENT		30.000 ALPHAC .003 2.000 4.000 GRADIENT
		REFERENCE DAT	50.FT.		•		•		•		•		•
MAR 76		REFER	2690.0000 474.8100 935.6800		20		20		20		20		Z G
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DATE 23 MAR 76	TABULATED	SOURCE DATA	TA - CA23B						PAGE 620	
		ARC 14-1	14-120(CA239)	747/1 ATI 0	03S1 (ORBITER DATA)	R DATA)		(4NH035)	17 00, 75	_
REFERENCE DATA)ATA						PAR	PARAMETRIC DATA		
SREF = 2690.0000 SQ.FT. LREF = 474.8100 in. BREF = 936.6800 in. SCALE =	X > 14	0000. 0000 375.0000	IN. X0			BETA RUDDER 10RB DY	# # # #		0000.	8808
		RN/L = 3	.30	GRADIENT INTERVAL	L = -5.00/	5.00				
• 20	45.000 ALPHAC .000 2.000 4.000 GRADIENT	DCL ,00098 -,02753 -,03984	DCD 00026 00184 00328	DCLM .00223 .0034 .00383	DCY 00039 00062 00052	0CYN .00005 00001 00016	DCBL .00020 00011 00051	ALPHAO 4.00000 6.00000 8.00000		
		RN/L = 3	.30 GRADIENT	ENT INTERVAL	5.00/	5.00				
. 20	50.000 ALPHAC .000 2.000 4.000 GRADIENT	0CL .00466 02542 03415	DCD .00001 00141 00270	00214 .00314 .00379	DCY -, 00051 -, 00086 -, 00091	DCYN 0006 00011 00026	DCBL .00013 00015 00062	ALPHAO 4.00000 6.00000 1.00000		
		ARC 14-1	14-120(CA23B)	747/1 ATI 03	0351 10PB11ER	DATA		(4NH036)	23 OCT 75	~
REFERENCE DATA	ATA						PAR	PARAMETRIC DATA		
SREF = 2690.0000 50.FT. LREF = 474.8100 1N, BPEF = 936.6900 1N, SCALE = .0125	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1109.0000 .0000 375.0000	IN. X0 IN. Y0 IN. Z0			BETA RUDDE 1048 DY	er Er	STA ELE OX MAC	0000.5	0000
		RN/L = 3	.31 GRADII	GRADIENT INTERVAL	5.00/	5.00				
• 20	3.500 ALPHAC 2.000 4.000 GRAD!ENT	DCL 04879 09803 02462	DCD 00713 01311 00299	DCLM .01623 .01746 .00061	DCY . 00304 . 00372 . 00372	DCYN 00008 .00053	DCBL .00006 .00021	ALPHAO B.00000 10.00000		
		RN/L = 3.	.30 CRADIENT	ENT INTERVAL	-5.00/	5.00				
• ZQ	7.500 ALPHAC ALPHAC 2.000 4.000 GPADIENT	DCL 04323 08968 02322	DCD -,00672 -,01204 -,00266	DCLM .01155 .01288 .00067	DCY . 00377 . 00349 00014	DCYN .0002 6 .00045	DCBL 00016 00010	AL PHAO B.00000 10.00000		

PAGE 621	OCT 75)		6 000000000000000000000000000000000000										
â	(4NH03E) (23 C	PARAMETRIC DATA	.000 STAB		AL PHAO B. 00000 10. 00000 1. 00000		ALPHAO B.00000 10.00000		ALPHAO B.00000 10.00000 1.00000		ALPHAO 8.00000 10.00000 1.00000		AI. PHAO 8 00000 10 00000 1 00000
		PARA	9 # H H		DCBL 00010 .00005		DCBL 00008 00004		DCBL 00047 00026		DCBL -,00056 -,00018		DCBL 00050 30019 .00016
	DATA)		BETA RUDDER 10RB DY	5.00	DCYN .00041 .00038	5.00	00000. 000032 000032	5.00	DCYN .00007 .00011	5.00	. 00000 . 00010 . 00010	5.00	DCYN .00014 00009 00011
	(ORBITER			-5.007	PCY .00384 .000.95 0001	-5.00/	DCY .00360 .00297 00032	-5.00/	DCY . 00271 . 00270 00001	. = -5.03/	DCY .00825 .00879	/00'S	007 .00207 .00258 .00025
	747/1 AT1 0351			NT INTERVAL	DCLM .00870 .01085	NT :NTERVAL	DCLM .00644 .00896 .00126	INT INTERVAL	DCLM .00510 .00586 .00088	ENT INTERVAL	DCLM .00585 .00586	ENT INTERVAL	DCLM .00389 .00533
- CA238	0(CA23B)		2000 2000 2000 2000 2000 2000 2000 200	.30 GRADIENT	DCD 00639 01124 00243	30 GRADIENT	DCD 00549 00985 00218	.29 GRADIENT	DCD 00374 00583 00104	.29 GRADIENT	DCD 00185 00314 00065	3.30 GRADIENT	DCD 00153 00194 00021
SOURCE DATA	ARC 14-12		1 0000.0011 1 0000. 375.	RN/L = 3.	0CL 04496 08657 02080	RN/L = 3.	DCL 04311 07959 01824	RN/L = 3	DCL 02866 05692	RN/L = 3	DCL 01920 04935	RN/L =	DCL 01903 03099 00648
TABULATED		174	XMRP YMRP #		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GHADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC 2.000 4.000 GRADIENT
		<u>ئ</u> س			•		•		•				
DATE 27 MAR 75	<u>;</u>		SREF = 2690.0000 S0 LREF = 474.8100 IN BREF = 935.6900 IN SCALE = .0125		20		20		20		22		20
						~1	TO AVIET THE	i					

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ARC 14-120(CA238) 747/1 ATI 0351 (ORBITER DATA)

1 75 1													
(4NH037) (23 CC.	PARAMETRIC DATA	.000 STAB .000 ELEVON * 6.000 DX		ALPHAO 6,00000 ° 8,00000 10,00000 1,00000		ALPHAO 6.00000 8.00000 10.00000 1.00000		ALPHAO 6.00000 8.00000 10.00000		ALPHAO 6.00000 8.00000 10.00000		ALPHAO 6,00000 8,00000 10,00000)
	PAR	* * # # CC		DCBL .00048 .00017		DCBL .00018 00011 00003		DCBL .00016 .00001 .00002		DCBL 00003 00018 .00010		OCBL 00032 00034 .00013	
2 DATA)		BETA RUDDS 10RB DY	5.00	. 00058 . 00017 . 00017	5.00	DCYN .00017 .00041 .00044	5.00	0000 . 000010 . 000010	5.00	DCYN . 000026 . 00013	5.00	00000 - + 00000 - + 00000 - + 00000 - + 00000 - + 00000 - + 0000000 - + 0000000 - + 00000000	
0351 (ORBITER DATA			. = -5.00/	00401 .00299 .00327	. * -5.00/	DCY .00311 .00353 .00258 00013	-5.00/	DCY .00287 .00230 .00231	-5.03/	DCY . 00239 . 00300 . 00186	-5.00/	DCY . 00175 . 00231 . 00204	1
747/1 AT1 0			GRADIENT INTERVAL	DCLM .01853 .01711 .01863	INT INTERVAL	DCLM .01268 .01209 .01445	'NT INTERVAL	DCLM .01074 .00957 .01239	NT INTERVAL	DCLM .00794 .00637 .00967	NT INTERVAL	DCI.M .00480 .00470 .00799	
14-120(CA23B)		N. XO IN. XO IN. ZO	32	000 00441 01488 01488	.32 GRADIENT	DCD 00456 01364 01364	31 GRADIENT	DCD - 00431 - 00818 - 01299	31 CRADIENT	DCD 00384 00729 01187 00201	32 GRADIENT	DCD 00253 00488 00738	
ARC 14-1		375.0000	RN/L = 3	DCL 01248 05894 10367	RN/L = 3	DCL -,01332 -,05422 -,09400 -,02017	RN/L = 3.	DCL 01025 05664 09193	RN/L = 3.	DCL 00819 05537 08634	RN/L = 3.	DCL 007.52 04208 06407	
)ATA	X X X X X X X X X X X X X X X X X X X		3.500 ALPHAC .000 2.000 4.000 GRADIENT		7.500 ALPHAC .000 2.000 4.000 GRADIENT		10.000 ALPHAC .000 2.000 4.000 GRADIENT		15.000 ALPHAC 0.00 2.000 4.000 GRADIENT		30,000 AUDUAC 0000 8,000 8,000 64,000	
	REFERENCE DATA	00 SQ.FT 00 IN. 25 IN.		• Z0		* 20		* 20		" 20		= 20	
	<u>a</u>	2690.0000 474.8100 936.6800		J		J		u		u		٥	
		SREF ** LREF ** BREF ** SCALE **											

i£ 623	1 75)			0000					0CT 75)		5.000 5.000 .000		
PAGE	(4NH037) (23 OCT	PARAMETRIC DATA		.000 STAB000 ELEVON000 MACH		ALPHAO 6.00000 8.00000 10.00000		ALPHAO 6.00000 8.00000 10.00000	(4NH038) (53 C	PARAMETRIC DATA	.000 STAB .000 ELEVON 6.000 DX		ALPHAO 6.00000 8.00000 10.00000
		PARA				DCBL 00036 00068 00006		DCBL 00027 00052 .00009		PAR	BETA "RUDDER "IORB "DY "		DCBL .00019 .00045 .00010
	DATA)			BETA RUDDER 10RB DY	5.00	.00002 .00007 .00007 00002	5.00	DCYN .00014 .00002 00015	COATA!		BETA RUDDE 1048	5.00	.00009 .00009 .000001 .00005
	1 (ORBITER				-5.00/	DCY .00180 .00134 .00233	-5.00/	DCY .00160 .00153 .00158	0351 (ORBITER			. = -5.00/	000 .000 .000 .000 .003 .003 .000
	747/1 AT1 0351				GRADIENT INTERVAL	DCLM . 00251 . 00599 . 03697	ENT INTERVAL	DCLM .00313 .00545 .00641	747/1 AT! 03			GRADIENT INTERVAL	DCLM . 01854 . 07811 . 0700
- CA23B) (CA23B)			000 2 4 00 2 00 00 2 0	.32 GRADIE	000 - 00198 - 00337 - 00469	.31 GRADIENT	000 -,00160 -,00284 -,00378	14-120(CA238)		IN. XO IN. YO IN. ZO	3.33 GRAD	000 00591 01010 01677
SOURCE DATA	ARC			1 000.00011 .0000 375.0000 1	RN/L = 3.	0CL 01336 02421 04167 00708	RN/L = 3	DCL 00026 02044 03793	ARC 14-1		1109.0000 0000 375.0000	RN/L	DCL .00191 094430
TARIB ATEN SO			€	XMRP YMRP ZMRP H		45.000 ALPHAC .000 2.000 4.000 GRADIENT		50.000 ALPHAC .000 2.000 4.000 GRADIENT		4	XMRP # ZMRP #		3.500 ALPHAC .000 2.000 4.000
, to	<u> </u>		AC TONING THE POST OF THE POST	SPEF = 2690.0003 53.FT. LREF = 474.8100 1N. BREF = 936.6900 11. SCALE = .0125		. 22		, 20		ATAC TO A POPULAR DE LA COMPANSION DE LA	SREF = 2690.0000 SQ.FT. LREF = 474.8100 [N. BREF = 936.6800 [N. SCALE = .0125		• 02

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SREF = LREF = BREF = SCALE =

PAGE 624	(4NH038) (23 CCT 75)
	ARC 14-120(CA238) 747/1 ATI 03SI (ORBITER DATA)
TABULATED SOURCE DATA - CAZ3B	ARC 14-120 (CA23B)
JATE 23 MAR 76	

	5.000 5.000 .000 .600										
PARAMETRIC DATA	.000 STAB .000 ELEVON		ALPHAO 6.00000 8.00000 10.00000		ALPHAO 6.00000 8.00000 10.00000		ALPHAO 6.00000 8.00000 10.00000		ALPHAO 6.00000 8.00000 10.00000		AL PHAO 6.00000 9.00000 10.00000
PARA	90F 8 # # #		DCBL .00004 .00015 00023		DCBL 00006 .00007 00014		DCBL00019		00032 00032 00001		DCBL 00024 00034 00035
	BETA RUDDER 1CRB DY	5.00	DCYN 25005 .00026 .00007	5.00	00000 .00009 .00003 .00003	5.00	00000. 000000. 00000000000000000000000	5.00	00000 90000 10000:	5.00	00001 - 00001 - 00008 - 00008
		-5.007	. 00170 . 00238 . 00238 . 00238	5.00/	DCY .00173 .00231 .00284	5.00/	007 00208 00234 00234 00298	. = -5.00/	00175 .00175 .00179 .00274	5.007	DCY . 00154 . 06212 . 06255
		ENT INTERVAL	DCLM .01237 .01224 .01475	ENT INTERVAL	00919 .00988 .00988 .00634	ENT INTERVAL	00100. 010033 010033	ENT INTERVAL	DCI.M .00471 .00569 .00782	ENT INTERVAL	DCLM .00343 .00439 .00536
	10. 00 10. 70 10. 20	.33 GRADIENT	DCD 00517 00917 01503	.33 GRADIENT	DCD 7.00456 00822 01438	.32 GRADIENT	000 00413 00752 01269	.32 GRADIENT	000 00276 00504 00883	.3: GRADIENT	DCD 00175 00548 00118
	1109.0000 .0000 375.0000	RN/L = 3	00514 03850 03850 09369	RN/L = 3	00526 .00526 .03481 .08528	RN/L = 3	DCL 00215 03194 03198	P:1/L = 3	000 00588 905989 758880 - 7589	RN/L = 3	00.000 00.000 00.000 00.000 00.000 00.000
АТА	X X X X X X X X X X X X X X X X X X X		7.500 ALPHAC .000 2.000 4.000 GRADIENT		10.000 ALPHAC .000 2.000 4.000 GRADIENT		15.000 ALPHAC .000 2.000 4.000 GRADIENT		30.000 ALPHAC .000 2.000 4.000 GRAD!ENT		45.000 ALPHAC .000 2.000 4.600 GRADIENT
NCE 0	S0.FT.		•		H		•		Ħ		#
REFERENCE DATA	2690.0000 St. 474.8100 11 936.6800 11		20		20		20		Z Q .		20

625	75 1		5.000 5.000 .000			15 1		8.000 8.000 9.000 .600						
PAGE	(4NH038) (23 OCT	PARAMETRIC DATA	.000 STAB		ALPHAC . 6.00000 12 8.00000 15 10.00000 10 1.00000	(4NH039) (23 OCT	PARAMETRIC DATA	.000 STAB 1 10.000 ELEVON 1 5.000 DX		AL PHAO B9 8.00000 184 10.00000 103 1.00000		ALPHAO 559 8.00000 542 10.00000		056 8.00000 051 10.00000 003 1.00000
	DATA)	•	BETA RUDDER 1088	5.00	- 00028 - 00004 - 00002 - 00004 - 00005 - 00012 - 00005 - 00015	DATAI		BETA RUDDER 1	5.30	DC9N DCBL (00089) (00089) (00089) (00089) (00089)	5.00	DC74 DCBL	5.00	CCYN DCBL .00030 .00056 .000720 .00061 .00003
	0351 (ORBITER			AL5.00/	DCY .00112 .00170 .00265	0251 (ORBITER			/AL = -5.00/	DCY .00328 .00155 00087	VAL = -5.00/	0CY 00-500. 07-500.	VAL5.007	DCY .00237 .00298
g	747/1 AT1			GRADIENT INTERVAL	54 .00321 25 .00423 53 .70595 97 .00069	B) 747/1 AT1			GRADIENT INTERVAL	DCLM 	GRADIENT INTERVA	DCL 4 .01019 .553 .01396 .01396	GRADIENT INTERVA	000 000 000 000 000 000 000 000 000 00
SOURCE DATA - CA238	ARC 14-120(CA23B)		09.00000 IN. YO	RN/L = 3,30 G	DCD	ARC 14-120 (CA238		375,0000 IN. X0	RN/L ≠ 3.35 0	DCL DCD 0543901020 1023201741 0242200360	P11/1 = 3.34 (000 04*8900895 04*8901553 0675901553	PN/L = 3.34 (DC: 000 - 00
TABULATED SC		REFERENCE DATA	SO.FT. XMRP = 11. IN. YMRP = 3	ãc	* 50.000 ALPHAC .000 2.000 H.000 GRADIENT		REFERENCE DATA	SQ.FT. AMAP 1	Œ	3.500 ALPHAC 2.000 4.000 GRADIENT	u.	7.500 A:PHAC 2.000 A.000 GRADIENT	•	10.000 ALFHAC 2.000 4.000 GPADIENT
DATE 23 MAR 76		REFER	FEF = 2690.0000 REF = 474.8100 SPEF = 936.6900 SCALE = .0125		20			SREF = 2690.0000 LREF = 474.8100 BREF = 936.6800 SCALE = .0125		2 0		20		20
۵				UKI	GINAL PAR POOR QUA									

DATE 23 MAR 76 T. REFERENCE DATA	TABULATED		SOURCE DATA - CA23B ARC 14-120(CA23B) 7	747/1 ATI O2SI (ORBITER DATA)	ISI (ORBITEF	OATA)	G AAARA	P (4NH039) (23 ·	PAGE 626
2690.0000 SO.FT. 474.8100 IN. 936.6800 IN.	X	0000. 0000 375.0000	20 00 10. 20 10. 20			BETA RUDDER 10RB DY		.000 STAB = 10.000 ELEVON = 6.000 DX = .000 MACH = .	8.000 .000 .000 .000
		RN/L * 3	3.34 GRADIE	GRADIENT INTERVAL	-5.00/	5.00			
• 2g	15.000 ALPHAC 2.000 2.000 GRADIENT	DCL 03908 08631 02362	DCD	. 00823 . 01154 . 00166	DCY . 00173 . 00203 . 00015	DCYN .00023 .00021	DCBL .00056 .00056	ALPHAO 8.00000 10.00000	
		RN/L = 3	3.33 GRADIE	GRADIENT INTERVAL	-5.00/	5.00			
• Za	30.000 ALPHAC 2.000 4.000 GRADIENT	DCL 02994 05831	000 00503 00851 00174	DCLM .00638 .00986 .00174	.00137 .00180 .00180	DCYN . 000097 . 00007	. 000022 . 00022 . 00022	ALPHAO 8.00000 10.00000 1.00000	
		RN/L = 3	3.33 GRADIE	GRADIENT INTERVAL	¥ -5.007	5.00			
• ZQ	45.000 ALPHAC 2.000 4.000 GRADIENT	DCL 01664 04666 01501	DCD 00362 00619 00128	00575 .00575 .00769	DCY ,00203 ,00248 .00023	DCYN .000099 .00008	DCBL .00000 00015	ALPHAO 8.00000 10.00000 1.00000	

ALPHAO 8.00000 10.00000

DCBL .00006 -.00009

DCYN .00011 .00001

00310 .00210 .00205 -.00003

DCLY .00535 .00594 .00079

DCD -.00341 -.00532 -.00096

DCL -.01470 -.04220 -.01375

50.000 ALPHAC P.000 Y.000 GRACIENT

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5.00

RN/L = 3.33 GRADIENT INTERVAL = -5.03/

527	r 75)		5,000	5.000										
PAGE	(4NH040) (17 OCT	PARAMETRIC DATA	- GATA	0000		AL PHAO 4.00000 6.00000 8.00000		ALPHAO 4.00000 6.00000 8.00000 1.00000		ALPHAO 4.00000 6.00000 8.00000 1.00000		ALPHAO 4.00000 6.00000 8.00000		AL PHAO 4.00000 5.00000 8.00000
		PARA	(. д 1. и и н СС		DCBL .00103 .00107 .00097		DCBL .00063 .00085 .00087		DCBL .00055 .00972 .00070		008L .00028 .00064 .00064 .00076		1,000 1,000 1,000 1,000 1,000 1,000
	OATA)			8L → RUCOEI 10₽8 DY	5.00	DCYN .00038 .00030 .00037	5.00	00026 .00026 .00027 .00000	5.00	00037 .00037 .00067 .00067	5.00	000017 000019 000000.	5.00	NADO 00000. 80000. 80000.
	I CORBITER				-5.00/	00226 .00226 .00210 .00231	-5.00/	007 .00238 .00168 .00154	-5.00/	00291 .00291 .00190 .00154	/03°5- ₽ 7	00154 .00159 .00109 .00058	ר= -5.00/	00121 .00121 .00138 .00044
	747/1 AT1 0251	,			NT INTERVAL	DCLM .01175 .01167 .01166	NT INTERVAL	DCLM .00862 .00842 .00876	ENT INTERVAL	00741 .00741 .00793 .00812	ENT INTERVAL	DCLM .00522 .00673 .00734	ENT INTERVAL	DCLM .00330 .00533 .00533 .00555
- CA238	CA238)			N. X0 IN. Y0 IN. Z0	33 GRADIENT	000 00545 00930 01364	.32 GRADIENT	DCD 00487 00831 01268	.32 GRADIENT	ECD 00462 00778 01194	3.32 GRADIENT	DCD 00414 00684 0553	3.33 GRADIENT	000 -,00269 -,00769 -,00709
COURTE DATA	و	•		1109.0000 .0000 375.0000	RN/L = 3.	DCL 02039 06091 10117	RN/L = 3.	DCL 01524 05715 09599	RN/L = 3	000 01397 05203 09185	RN/L = 3	DCL 01824 04705 03350	RN/L =	001399 - 01399 - 01399- - 015519-
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2	į	ď	XMAP * ZMRP *		3.500 ALPHAC .000 2.000 4.000 GRADIENT		7.500 ALPHAC .000 2.000 4.000 GRADIENT		10.000 ALPHAC .950 2.000 4.000 GRADIENT		15.000 ALPHAC .000 2.000 4.000 GRAD:EHT		30.000 ALPHAC .000 2.000 4.000 GRADIENT
		i	ה ק	. F		•		*		•		•		•
:	DATE 23 MAH 16		REFERENCE DATE	SPEF = 2690.0000 SO. LREF = 474.8100 IN BREF = 936.6800 IN SCALF = 0125		20		20		07		20		20
1	Ö			w _ı mo.v)									

TABULATED SOURCE DATA - CA23B

SE 628	7. 17.	•		5.000 5.000 .000 .000					75		5.000 5.000 .000 .600				
PAGE	E COHOHON		PARAMEINIC DAIA	.000 STAB070 ELEVON 4.000 DX		ALPHAO 4.00000 6.00000 8.00000		AL PHAO 4.00000 6.00000 8.00000	.30 41 3 (01XHN+3		.000 STAB = .000 ELEVON = .000 MACH = .000		ALPHAO 10.00000 12.00000 1.00000		AL PHAO 10.00000 12.00000 1.00000
		6	ב ע ע	# # H H		DCBL . 00008 . 03016 . 03027		DCBL - 00005 - 00005 - 00006		Ó	4 00 4 L H II H N		DCBL .00063 .00024		DCBL .00090 .00047
	R DATA)			BETA RUDDA 10RB DY	5.00	DCYN . 00006 . 00001	5.00	00000	P DATA)		BE TA RUDDEI 10RB DY	5.00		5.00	0CYN 00067 00062
	02S1 (OPB17E				L = -5.00/	00108 .00108 .00104 .00132	-= -5.00/	DCY .00077 .00069 .00194	02SI (ORBITER			= -5.00/	00150 00199 00199	-5.007	. 00140 . 00191 . 00025
	747/1 AT1 C				ENT INTERVAL	DCLM .00261 .00416 .00528	ENT INTERVAL	00CLM .00238 .00369 .00527	747/1 AT1 06			NT INTERVAL	DCLM .01199 .01598	NT INTERVAL	DCLM .01037 .01401
85040 h 4	20 (CA239)			000 N.V. 2400	33 GRADIENT	000 - 00159 - 00287 - 009458	. 32 GRADIENT	565 	-120(04238)		1N. XO 1N. YO	34 GRADIENT	CCD 01037 02320 0642	3- GRADIENT	000 -, 00942 -, 00550 -, 00559
בובה השתבה ה	ARC 14-4			1109.0000 .0000 375.0000	RN/L = 3	DCL 00796 02957 04340 06886	RN/L = 3	DCL 00684 02764 03577 00723	ARC 14-18		1109.0000 .0000 375.0000	RN/L = 3.	DCL 05575 09646 02035	RN/L = 3.	DCL 05298 09099 01900
		ATA		XMRP YMRP ZMRP #		45.000 ALPHAC .000 2.000 4.000 GRADIENT		50.000 ALPHAC .000 2.000 4.000 GRADIENT		ITA	XMRP = YMRP = ZMRP =		3.500 ALPHAC 2.000 4.000 GRADIENT		7.500 ALPHAC 2.030 4.000 GRADIENT
		REFERENCE DATA	# 2590 0000 co rt	+7'+.8100 IN. +7'+.8100 IN. = 936.5800 IN.		. 20		• Z0		REFERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		ZQ		* 20
			SRFF	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							0.000 000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.				

ALPHAO 10.00000 12.00000

DCBL .00090 .00047 -.00022

E 629	T 75 1		5.000 5.000 .000 .600										
PAGE	17 001	DATA	STAB # ELEVON # DX # MACH #		0000 0000		140 100 100 100		0000 0000 0000		ALPHAO 3.00000 2.00000		НАО 000 000 000
	(4NHX10)	PARAMETRIC	0000		ALPHAO 10.00000 12.00000 1.00000		ALPHAO 10.00000 12.00000		ALPHAO 10.00000 12.00000		211		ALPHAO 10.00000 12.00000 1.00000
		PAR	# # # N CC		0CBL .00119 .00073		DCBL .00087 .00037 00025		DCBL .00059 .00037		DCBL . 000064 00006 00035		008L .00046 00046
	2 DATA1		BETA RUDDE 10RB DY	5.00	DCYN 00016 00071 00028	5.00	DCYN 00035 00082	5.00	DCYN 00052 00096	5.00	DCYN 00048 00085 00018	5.90	DCYN 00047 00086
	SI (ORBITER			-5.00/	00146 .00146 .00197	.= -5.00/	DCY .00075 .00135	L = -5.00/	750 .00091 .00073	L= -5.00/	DCY .00172 .00159	1 = -5.00/	DCY .00187 .00202
	747/1 ATI 0251			GRADIENT INTERVAL	DCLM .00920 .01262	ENT INTERVAL	DCLM .00785 .01092	INTERVA	DCLM .00581 .00807	ADIENT INTERVAL	0000 .00601 .00601	ENT INTERVA	DCLM . 00389 . 00542
CA23B	14-120(CA23B) 7		2 4 X X X X X X X X X X X X X X X X X X	.33 GRADIE	DCD 00875 01867 00496	.35 GRADIENT	000 00791 01697 00453	.35 GRADIENT	000 -,00435 -,01078 -,00322	3.35 GRADI	000 - 00194 - 00561	3.35 GRADIENT	000 1.00202 1.00215
SOURCE DATA	ARC 14-18		1109.0000 .0000 375.0000	RN/L = 3	DCL 05056 08655	RN/L = 3	DCL -,04969 -,08298	RN/L = 3	DCL 03451 06216 01382	RN/L = 3	DCL 02022 04393	RN/L =	DCL 02212 03854
TABULATED		ΤA	XMRP YMRP #		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GHADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT		45.000 ALPHAC 2.000 4.000 GRAD LENT		50.000 ALPHAC 2.000 4.000
		NCE DA	50.FT. IN. IN.		и		•				P .		u
MAR 76	•	REFERENCE DATA	2690.0000 S6 474.8100 11 936.6800 11		DZ		20		20		20		20

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ORBITER DATA
1 0251 (
747/1 AT
14-120(CA23B)
ARC 1

OCT 75)		7.000 .000 .000 .000										
(4NHX13) (17 0	RIC DATA	STAB ELEVON TO DX MACH TO MACH		ALPHAO 8.00000 10.00000		ALPHAO 8.00000 10.00000 1.00000		AL PHAO 8.00000 10.00000 1.00000		AL PHAO B. 00000 0. 00000 1. 00000		AL PHAO 8.00000 0.00000 1.00000
艺	PARAMETR I C	0000.		DCBL		DCBL 8. .00098 8. .00136 10.		DCBL A		DCBL A		DCBL A00045 800076 1000316 1
DATAI		BETA RUDDER 10AB	5.00	DC VN DC VN O DC VN O O O O O O O O O O O O O O O O O O	5.00	DCYN DC · 00019 · 0 · 00007 · 0	5.00	0. 00003 0. 00003 0. 00003	.00	. 00001 . 00001 . 00005	.00	0. 00003 0. 000003 0. 000003
UZSI 10RBITER DATA			-5.00/	DCY .00122 .00027	-5.00/	DCY .00037 0005	* -5.00/	DCY 00029 .00005	-5.00/ 5	DCY -, 00055 -, 00015	* -5.00/ 5	DCY 00053 . 00067
/*// A11 G			GRADIENT INTERVAL	DCLM .01275 .01608	GRADIENT INTERVAL	DCLM .01020 .01324 .01324	ENT INTERVAL	DCLM .00963 .01250	ENT INTERVAL	DCLM .00807 .01094	ENT INTERVAL	DCLM .00681 .00895
ANC 14-1001CAC5B)		2 2 2 X X X X X X X X X X X X X X X X X	3.34 GRADI	DCD 00887 01668	3.34 GRAD!	000 00852 01536 0342	3.33 GRADIENT	DCD 00839 01493 0327	3.35 GRADIENT	000 00707 01339	3.35 GRADIENT	DCD 00498 0034 00218
11 74		1109.0000 .0000 375.0000	RN/L *	DCL 05901 10852 02476	RN/1:	DCL 05802 10152 02175	RN/L =	DCL 05668 09935 02133	RN/L = 3	DCL 05432 03492 02030	PN/L = 3	04048 07353 01656
	ATA	XMRP YMRP ZMRP		3.500 ALPHAC 2.000 4.000 GRADIENT		7.500 ALPHAC 2.000 4.000 GHADIENI		10.000 ALFHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GRADIENT		30,000 ALPHAC 2,000 4,000 GRADIENT
	REFERENCE DATA	S0.57		•				•		u		и
	REFER	2690.0000 474.8100 935.6800		20		20		20		20		20
		S										

TABULATED A
XMRP # 1109.0000 IN. XO YMRP # .0000 IN. YO ZMRP # 3 5.0000 IN. ZO
RN/L = 3.35 GRADIENT
45.000 DCL DCD DCD
RN/L = 3.35 GRADIENT
50.000 DCL DCD 2.002800271300280 4.0000504900491 GRADIENT01169
ARC 14-120(CA238)
ХЖЯР = 1109.0000 IN. XO ХЖЯР = .0000 IN. YO ZЖЯР = 375.0000 IN. ZO
RN/L = 3.34 GRADIENT
3.500 ALPHAC DOL DCD 2.0000509100899 4.0001159901682 GPADIE110275400391
PHIL = 3.34 GRADIENT
7.500 ALFMAC DCL DCD 2.0000558500842 4.0001052701539 OPADIENT0247100349

F POOR QUALUM

PAGE 632	CT 75)		5.000 5.000 .600										
ů.	(4NHX14)	PARAMETRIC DATA	.000 STAB000 ELEVON 6.000 DX		ALPHAO 8.00000 10.00000		ALPHAO 8.00000 10.00000		AL PHAO B.00000 10.00000 1.00000		AL PHAO B.00000 10.00000		ALPHAO B.00000 10.00000 1.00000
		PAR	0 6 4 1 Oc		DCBL .00093 .00136		DCBL .00103 .00123		DCBL .00059 .00078		DCBL .00061 .00065		. DCBL . 00059 . 00071
	(ORBITER DATA)		BETA RUDDI 10RB DY	5.00	DCYN .00012 .00010	5.00	DCYN .00013 .00007	5.00	DCYN .00001 00010	5.00	DCYN . 00018 . 00019	5.00	DCYN 00011 00019
	O2SI (ORBITE			5.00/		5.007	00120 00057 00067	. = -5.007	DCY 00123 00072	-5.007	DCY 00025 00052 00013	-5.00/	DCY 00152 00054 .00049
	747/1 ATI 0			ENT INTERVAL	. 00538 . 00751 . 00761	ENT INTERVAL	001M .00528 .00655	INT INTERVAL	DCLM .00452 .00574 .00061	GRADIENT INTERVAL	, 00415 , 00505 , 00505	INT INTERVAL	DCLM .00458 .00495
A - CA23B	14-120(CA23B)		N	.33 GRADIENT	00821 00821 01481 00330	.35 GRADIENT	DCD 00703 01287 0592	.35 GRADIENT	DCD 03494 00888 00197	35 CRADIE	0CD C0391 C0556 00682	35 GRADIENT	DCD 00320 05522 00101
SOURCE DATA	ARC 14-1		1109.0000 .0000 375.0000	RN/L = 3	DCL 05635 10389 02377	RN/L = 3	DCL 05353 09590 02118	RN/L = 3,	DCL 03869 07191 01666	RN/L = 3.	DCL 02952 05116 01082	RN/L = 3,	DCL 02251 04945 01347
TABULATED		ATA	XMRP YMRP ZMRP		10.000 ALFHAC A.000 4.000 GRADIENT		15.000 ALPHAC A.000 H.000 GHADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC 2.000 4.000 GRADIENT
23 MAR 76		REFERENCE DATA	= 2690.0000 SO.FT. = 474.8100 lN. = 936.6800 lN. E = 0.0125		• 2a		• 20		• 20		• 2g		• Z0
DATE			SAEF LOSF BREF SCALE										

		TABULATED	SOURCE	- CA23B	747/1 AT! 0251	SI CORBITER	DATAI	C	PA (4NHX15) (17 (PAGE 633
REFERENCE DATA	-	⋖						PARAP	PARAMETRIC DATA	
·		XMRP YMRP ZMRP #	1 109.0001 1 0000. 375.	N. X N. X N. X N. X N. X			BETA RUDDER 10RB DY		.000 STAB .000 ELEVON .000 DX	5.000 5.000 600 600
			RN/L = 3.	3.34 GRADIENT	NT INTERVAL	-5.00/	5.00			
•	٥	3.500 ALPHAC 2.000 4.000 GRADIENT	DCL 06896 11503 02304	DCD 01387 02678 00646	DCLM .00831 .01207	.00080 .00149	DCYN .00015 00003	DCBL .00137 .00122	ALPHAO . 10.00000 12.00000 1.00000	
			RN/L = 3	.34 GRADIENT	INT INTERVAL	-5.00/	5.00			
•	ی	7.500 ALPHAC 2.000 4.000 GRADIENT	DCL 06158 10429 02136	DCD 01118 02369 00625	00172 .00772 .01082	DCY .00003 .00131	DCYN 00007 00024	DCBL .00138 .00100 00019	ALPHAO 10.00000 12.00000 1.00000	
			RN/L = 3	.33 GRADIENT	ENT INTERVAL	-5,00/	5.00			
- O	_ 5	10.000 ALPHAC 2.000 4.000 GRAD 1ENT	DCL 05639 09661	000 00946 02157	DCLM .00721 .00998	. 00064 . 00064 . 00032	00004 00004 00035	DCBL .00139 .00078 00030	ALPHAO 10.00000 12.00000 1.00000	
			RN/L = 3	.35 GRADIENT	ENT INTERVAL	-5.00/	5.00			
*		15.000 ALPHAC 2.000 4.000 GRADIENT	DCL 05254 08731	DCD 00828 01973	DCLM .00509 .00353	507 .00025 .00067	DCYN 00013 00067 00087	DCBL .00115 .00091 00012	ALPHAO 10.00000 12.00000 1.00000	
			RN/L = 3	3.35 GRADIENT	ENT INTERVAL	. * -5.00/	5.00			
		30.000 A_PHAC P.000 4.000 GRADIENT	DCL 03332 06374 01521	000 00418 01162 00372	DCLM .00472 .00643	0007 00079 00100.	DCYN 00024 00075	DCBL .00096 .00076	ALPHAO 10.00000 12.00000 1.00000	

S TABULATED SOURCE DATA - CA23B	
DATE 23 MAR 76	

F 534	1 75 J		5.000 10.000					1 75 1		5.000 5.000 20.000				
PAGE	17 00		* * * * * _ Z _ O					1 17 OCT	_					
	(4NHX15)	IIC DATA	STAB ELEVON DX MACH		ALPHAO 0.00000 0.00000		ALPHAO 0.00000 2.00000	(4NHX16)	IC DATA	STAB ELEVON DX MACH		ALPHAO B.00000 10.00000		ALPHAO 3.00000 0.00000
	Ž	PARAMETRI			210-		5.0	Ż	PARAMETR			40 – M		# <u>-</u>
		<u>a</u>	2		DCBL .00049 .00034		DCBL .00063 .00044 00009		Q.	# # # # CC		00115 00115 00141		. 00093 . 00011
	2 DATA)		BETA PUDDEI 10RB DY	5.00	DCYN 00043 00065	5.00	DCYN -, CGO41 -, 00081 -, 00081	R DATA)		BETA RUDDER ICRB DY	5.00	DCYN .00032 .00020 -	5.00	DCYN .00038 .00025 00025
	0251 (ORBITER			L = -5.007	DCY .00061 .00190	L = -5.00/	00098 .00098 .00159	O2S1 (ORBITER			L = -5.007	000 14 .000 00 00 00 00 00 00 00 00 00 00 00 00	L5.00/	00129 .00119 .00119
	0 11A 11747			GRADIENT INTERVAL	DCLM .00389 .00515	ENT INTERVAL	DCLM .00380 .00486	0 114 1/747			ENT INTERVAL	DCLM .00471 .00516	ENT INTERVA	DCLM .00229 .00261
1A - CA23B	-120(CA23B)		1N. X0 1N. X0 1N. X0	3.35 GRADI	0CD 00303 00679	3.35 GRADIENT	DCD 00208 00513	-120(CA238)		N N N N N N N N N N N N N N N N N N N	3.34 GRADIENT	000 00634 01393 00379	3.34 GRADIENT	DCD 00622 01320 00349
SOURCE DATA	ARC 14-		1109.0000 0000. 375.0000	RN/L .	050 02608 04649	RN/L =	DCL 02004 03890 00943	ARC 14-1		1109.0000 0000. 375.0000	RN/L =	CCL 06113 11479 02683	RN/L	DCL 05638 10634 10634
TABULATED		MTA	XXXX XXXX 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC 2.000 4.000 GHADIENT		ATA	2 GRAY GRAY GRAY 1 GRAY		3.500 ALPHAC 2.000 9.000 GRADIENT		7.500 ALPHAC 2.000 4.000 GRADIENT
MAR 76		REFERENCE DATA	2690.0000 SQ.FT. 474.8100 IN. 936.6800 IN.		. 20		20		REFERENCE DATA	2690.0000 50.FT. 474.8100 1N. 936.6800 1N.		• ZO		2 0
DATE 23			SREF ** LREF ** BREF ** SCALE **							SREF ** LREF ** PREF ** SCALE **				

TABULATED SOURCE DATA - CA238	
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E 635	1 75)		5.000 20.000 .600										
PAGE	(4NHX16) (17 OCT	PARAMETRIC DATA	.000 STAB .000 ELEVON 6.000 DX		ALPHAO 8.00000 10.00000 1.00000		ALPHAO 8.00000 10.00000		ALPHAO 8.00000 10.000000		AL PHAO 8.00000 10.00000		AL PHAO B. 00000 10. 00000 1. 00000
		PAR/			DCBL .00085 .00114		DCBL .00075 .00093		DCBL .00028 .00078 .00025		DCBL .00041 .00038		DCBL .09043 .00037
	DATA)		BETA RUDDE 1048 DY	5.00	00022 .0000. .0001.	5.00	DCYN .00016 .00004 00006	5.00	DCYN .00003 00003 	5.00	ECYN. 200003 2100015-	5.00	DC YN . 00009 00013
	1 ORBITER			-5.00/	DCY .00052 .00091	-5.00/	DCY .00033 .00\$02.	5.00/	00039 .00039 .000700	-5.00/	0CY .00053 .00123	. = -5.00/	0007 .00078 .00033
	747/1 ATI 0251			NT INTERVAL	00158 .00158 .00197	NT INTERVAL	DCLM .00137 .00191	NT INTERVAL	DCLM : 00190 : 00249	INT INTERVAL	DCLM .00259 .00302	ENT INTERVAL	DCLM .00266 .00298 .00016
- CA23B	14-120(CA23B) 74		7. X.	33 GRADIENT	000 -,00624 -,01282 -,00329	.35 GRADIENT	000 00599 01199	.35 GRADIENT	000 - 00459 - 00841 - 16100	.35 GRADIENT	000 -,00346 -,00564 -,00564	.35 GRADIENT	DCD 003300 00097
SOURCE DATA	ARC :4-12		375. G000 375. G000	RN/L = 3.	DCL 05540 10503 02430	RN/L = 3	OCL 05123 09558 02224	RN/L = 3	DCL 03825 07393	5 = 7/Na	100 1000 - 10000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000	RN/L = 3	2000 2000 2000 2000 2000 2000 2000 200
TABULATED		ATA	XMRP YMRP ZMRP		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALFHAC 2.000 4.000 GHADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT		45,000 ALPHAC 2,000 4,000 GRADIENT		50.000 ALPHAC 2.000 9.000 GRAD:ENT
		NCE	S0.FT.		•		•				u		•
DATE 23 MAR 76		REFERENCE DATA	SREF = 2690.0000 1 LREF = 474.8100 1 BREF = 936.6800 1 SCALE = .0125		20		20		20		20		20

CA23B
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DATA
SOURCE
TABULATED

1AR 76		TABULATED	SOURCE DATA	TA - CA238						PAGE	636
			ARC 14-	14-120(CA23B)	747/1 AT1 08	0251 (ORBITER	R DATA)		(4NHX17)	1.7 OCT	75
13436	REFERENCE DATA	DATA						PAR	PARAMETRIC DATA		
2693.0000 474.8100 936.6900	50.FT.	XMRP YMRP ZMRP	1109.0000 .0000 375.0000	N. X0 N. X0 N. Z0			BETA RUDDER 10RB DY		.000 STAB .000 ELEVON 8.000 OX .000 MACH		5.000 5.000 20.000
			RN/L =	3.34 GRADIENT	ENT INTERVAL	-5.00/	5.00				
20	• .	3.500 ALPHAC 2.000 4.000 GRADIENT	DCL 07194 11485 02145	DCD 01240 02458 0609	DCLM .00609 .00788	DCY 00009 .00325	DCYN .00004 00012 00008	DCBL .00072 .00103	ALPHAO 10.00000 12.00000 1.00000		
			RN/L =	3.34 GRADIENT	ENT INTERVAL	= -5.007	5.00				
20		7.500 ALPHAC 2.000 4.000 GHADIENT	DCL 06455 10796 02171	DCD 00980 02295	DCLM .00492 .00649	. 00109 . 00238 . 0064	DCYN 00000 00033	00092 .00092 .00079	ALPHAO 10.00000 12.00000 1.00000		
			RN/L =	3.33 GRADIENT	ENT INTERVAL	-5.007	5.00				
20	•	10.000 ALPHAC 2.000 4.000 GRADIENT	DCL 05907 10245 02169	DCD 00811 02173 0681	DCLM .00395 .00552	. 00176 . 00170 . 00008	DCYN .00000 00048	DCBL .00109 .00060	ALPHAO 10.00000 12.00000 1.00000		
			RN/L =	3.35 GRADIENT	ENT INTERVAL	-5.00/	5.00				
20	•	15.000 ALPHAC A.000 4.000 GRADIENT	DCL 05730 09769 02020	DCD 00772 02025 0627	M 100 . 00293 . 00436 . 0007	DCY .00212 .00168	DCYN -,00009 -,00059	DCBL .00072 .00048	ALPHAO 10.00000 12.00000		
			RN/L = 3	3.35 GRADIENT	ENT INTERVAL	-5.00/	5.00				
20	W	30.000 ALPHAC 2.000 4.000 GRADIENT	DCL 04240 07051 01406	DCD 00486 01311 0413	00233 .00233 .00381	DCY .00215 .00276	DCYN 00015 00080	008L .00070 .00026	ALPHAO 10.00000 12.00000 1.00000		

637	. 75 .		5.000 5.000 20.000 .600		·.			(27 1;		5.000 .000 .000 .600				
PAGE	(4NHX17) (17 OCT	PARAMETRIC DATA	.000 STAB .000 ELEVON 000 DX		ALPHAO 10.00000 12.00000 1.00000		ALPHAO 10.00000 12.00000 1.00000	(4NHX27) (17 OCT	PARAMETRIC DATA	.000 STAB .000 ELEVON B.000 DX		ALPHAO 10.00000 12.00000 1.00000		ALPHAO 10.00000 12.00000 1.00000
		PARA	11 8 11 H		008L .00054 00009		DCBL .00043 00008 00026		PAR	# # # # E W W H H H H H H H H H H H H H H H H H		DCBL .00023 .00047 .00012		008L .00045 .00033
	DATAI		BETA RUDDEF 10RB DY	5.00	DCYN 00049 00082	5.00	0CYN 00034 00078 00062	DATA		BETA RUDDER 10RB DY	5.00	.00121 .00028 00028	5.00	840000.1 000003.1
	S1 (ORBITER			-5.00/	DCY .00145 .00261 .00058	× -5.00/	DCY .00184 .00311	O351 (ORBITER			-5.00/	.00335 .00239 .00239	L = -5.00/	DCY .00237 .00283 .00023
	747/1 AT1 0251			NT INTERVAL	DCLM .00257 .00347	INT INTERVAL	DCLM .00242 .00323	747/1 AT1 03			ENT INTERVAL	DCLM .01470 .02238	ENT INTERVAL	DCLM .01227 .01866
- CA238	14-120 (CA23B) 74		000 2 × × × 2 × × ×	35 GRADIENT	DCD 00341 00754 00207	.35 GRADIENT	DCD 00301 00657 00173	-120 (CA23B)		IN. X0 IN. Y0 IN. Z0	3.31 GRADIENT	0CD 00721 02110 06694	3.30 GRADIENT	000 00713 02045
SOURCE DATA	APC		1 0000.0011 1 0000.375	#N/L = 3.	DCL 02781 05007 01113	RN/L = 3	DCL 02792 04699 00954	ARC 14-1		0000. 375.0000	PN/L = 3	DCL 04486 09167	RN/L =	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
TABUL ATED		ATA	XMRP # YMRP # ZMRP #		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC 2.000 4.000 GraDleNI		DATA	XMRP **		3.500 ALPHAC 2.000 4.000 GRADIENT		7.500 ALPHAC 2.000 4.000 5RAD1ENT
₩ ₩ ₩		TAC TOURDED TAG	2690.0000 SO.FT. 474.8100 IN 936.6800 IN.		20		• 20		REFERENCE DATA	2690,0000 SQ.FT. 474.8100 IN. 936.6800 IN.		" 20		. 20
7 50 3160	3		SREF # LREF # BREF # ACAIR		ORIGIO OF PO	NAI OR	L PAGE I	8		SREF " LREF " PREF " SCALE "				

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PAGE 0338	٢		PARAMETRIC DATA	BETA = .000 STAB = 5.000 RUDDER = .000 ELEVON = .000 10RB = 8.000 DX = .000 DY = .000 MACH = .600	GRADIENT INTERVAL = -5.00/ 5.00	DCLM DCY DCYN DCBL ALPHAO 01027 .00132 .00061 .00072 10.00000 .01570 .00294 .00005 .00023 12.00000 .00272 .000810003000025 1.00000		1 1	INTERVAL * -5.00/ 5.00	DCLM DCY DCYN DCBL ALPHAO .00603 .00198 .55306 .00024 10.00000 .01148 .0036133526 .00011 12.00000 .00272 .000820001600006 1.00000	INTERVAL = -5.00/ 5.00	DCLM DCY DCYN DCBL ALPHAO .00590 .00214 .0503600018 10.00000 .01047 .00255 .00321 .00037 12.00000 .00228 .00020 .00007 .00027 1.00000	GRADIENT INTERVAL5.00/ 5.00	
TABULATED SOURCE DATA - CA23B	ARC 14-120(CA23B)			0.0000 1N. XO 0.0000 1N. YO 0.0000 1N. XO 0.0000 1N. XO	RN/L = 3.30	0 HAC DCL DCD 0000465500692 0000874102011 ENT0204300659	RN/L = 3.30	HAC DCL DCD 0000470800743 0000817201886 0173201732	RN/L = 3.29	74C DCL DCD 2000359900454 2000504401362 2100125200454	RN/L = 3.30	45 DCL DCD 1500209000261 200416700970 310103900355	RN/L = 3.30	AC DCL DCD 0000236
DATE 23 MAR 76 TABU		REFERENCE DATA	#1 00 0000 U096 #	NT 0000.050 936.6800 IN		DZ • 10.000 ALPHAC 2.050 4.020 GRADIENT		DZ = 15.000 ALPHAC 2.000 C.000 C.000		DZ = 30.000 ALFHAC 2.000 4.000 4.000 GRAD:ENT		D2 = 45.000 ALPH40 2.000 2.000 4.000 6RAD FENT		DZ = 50.000 ALPHAC Z.000 H.000

639	15)		5.000 .000 10.000										
PAGE	17 001												
	(58)	IC DATA	STAB ELEVON DX MACH		ALPHAO B.00000 10.00000		ALPHAO 8.00000 10.00000		ALPHAO B.00000 10.00000 1.00000		ALPHAO 8.00000 10.00000		AL PHAO 8.00000 10.00000 1.00000
	(BEXHN+)	PARAMETR1C	. 000 . 000 6 . 000										
		à	1 1 1 1 2 W		OCBL .00045 .00051 .00003		DCBL .00018 .00033		.00011 .00038 .00038		DCBL -,00006 ,00022		008L -,00020 -,00005 -,00012
	DATA)		BETA RUDDEF 10PB DY	5.00	0CYN .00062 .00103 .00021	5.00	DCYN .00059 .00084	5.00	75000; 75000; 75000; 75000;	5.00	DCYN .00039 .00055	5.00	0004 000030 00030 00003
	03S1 (ORBITER DATA)			* -5.00/	0CY .00275 .00283 .0000,	. = -5.00/	DCY .00261 .00240 00011	-5.00/	. 00192 . 00192 . 00001	L = -5,007	DCY .00193 .00153 00020	ال ء -5.00/	.00150 .00170 .00170
	747/1 AT1 03			GRADIENT INTERVAL	$\tilde{\Omega} \cdot \cdot \cdot$	INT IN ERVAL	00000 48500 48500	ENT INTERVAL	00360 .00360 .0050	ENT INTERVAL	DCLM .00181 .00286	IENT INTERVAL	DCLM .00161 .00364
- CA238	0(CA23B)		2000 1 X X X X X X X X X X X X X X X X X X X	31 GRAD1E	000 00731 01249 00259	.30 GRADIENT	000 00679 01194 00257	3.30 GRADIENT	000 00672 01149	3.30 GRADIENT	000 - 00613 - 01039 - 1500	3.29 GRADIENT	CCD 90447 00658 00105
SOURCE DATA	ARC 14-12		1109.0001 10000. 375.	RN/L = 3	DCL 05591 10299 02354	RN/L = 3	DCL 05119 09406 02144	RN/L = 3	000 -, 04934 -, 09185	RN/L =	DCL 94749 08837 02044	RN/L .	DCL -,03913 -,05512 -,01309
TARUM ATED		4	XMRP YMRP #		3.500 ALPHAC 2.000 4.000 GRADIENT		7.500 ALPHAC 2.000 4.000 GRADIENI		10.000 ALPHAC 2.000 4.000 GRADIENT		15.900 ALPHAC 2.000 4.000 GRADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT
		ر ا	S0.F1.		•						•		n
Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	<u> </u>	4140 7000000	7272727 7474.8100 SQ 7474.8100 SQ 7474.8100 SQ 76100 SQ 7		20		20		20		20		02
4			SPEP 1. PEF 1. P										

DATE 23 MAR 76	TABULATED	SOURCE DATA	'A - CA238					PACE	049 30
		ARC 14-1	-120(CA23B)	747/1 AT1 0351	(ORBITER DATA)	DATA)		(4NHX28) (17 OC	1 27 13
REFERENCE DATA	DATA						PARA	PARAMETRIC DATA	
SREF = 2690.0000 SO.FT. LREF = 474.8100 IN. BREF = 936.6800 IN. SCALE = .0:25	XMRP YMRP ZMRP	1109.0000 ,0000 375.0000	1N. XO 1N. XO			BETA RUDDER 10RB DY	0 E # # # E	.000 STAB	5.000 .000 10.000
		RN/L = 3	3.30 GRADIENT	IENT INTERVAL	-5.00/	5.00			
• 2G	45.000 ALPHAC 2.000 4.000 GRADIENT	CCL 02768 04800 01016	DCD 00311 06420 00054	DCLM .00276 .00236	DCY .00082 .00153	00008 .00008 .00025	DCBL 00037 .00026	ALPHAO 8.00000 10.00000 1.00000	
		RN/L = 3	3.30 GRADIENT	IENT INTERVAL	-5.03/	5.00			
• 20	50.000 ALPHAC 2.000 4.000 GMADIENI	DCL 01967 03884 06958	DCD 00272 00341 00034	DCLM .00351 .00374	DCY .00081 .00152	00003 .00013 .00000.	DCBL 00052 .00009	ALPHAO 8.00000 10.00000	
		ARC 14-1	-120(CA23B)	747/1 ATI 0351	1 (ORBITER	DATA		(4NHX29) (17 0	OCT 75)
REFERENCE DATA	ATA						PARA	PARAMETRIC DATA	
SREF * 2690.0000 50.FT. LREF * 474.8100 IN. PREF * 936.5800 IN. SCALE * .0125	X X X X X X X X X X X X X X X X X X X	1109.0000 .0000 375.0000	IN. X0 IN. Y0 IN. Z0			BETA RUDDER IORB DY	60 6 11 11 11 61	.000 STAB .000 ELEVON .009 DX	5.000 10.000 10.000
		RN/L = 3	3.31 GRADIENT	IENT INTERVAL	* -5.00/	5.00			
2 0	3.500 ALPHAC 2.000 4.000 GRADIENT	DCL 06068 11040 02486	DCD 01152 02446 00647	OCLM .01200 .01766	. 00058 00038 00058 00069	NY 2000	0CBL .00043 00044	ALPHAO 19.00000 12.00000 1.00000	
		PN/L = 3	3.30 GRADIENT	IENT INTERVAL	-5.00	5.00			
2 0	7.500 ALPHAC 2.000 4.000 GRAD!ENT	0CL -,05537 -,10244 -,C2353	000 00889 02287	DCLM .00902 .01457	DCY . 00218 . 00323 . 00053	DCYN .00073 .00031	DCBL .00057 00022	AL PHAO 10.00000 12.00000 1.00000	

ABULATED SOURCE DATA - CA238	
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PAGE 641	•	5000.01 0000.01								·		
6 (17		.000 STAB .000 ELEVON .000 DX .000 DX .000 DX .000 HACH .		ALPHAO 10.00000 12.00000		AL PHAO 10.00000 12.00000 1.00000		ALPHAO 10.00000 12.00000 1.00000		ALPHAO 10.00000 12.00000 1.00000		ALPHAO 10.00000 12.00000 1.00000
2	PARAMETRIC	# # # # E		DCBL .00064 00055		DCBL .00050 .00002 .000024		008L .00026 .00018		DCBL 00005 .00052 .00029		DCBL .00033 .00013
DATA)		9ETA RUDDER 10RB DY	5.00	00062 . 00010 . 00010 00026	5.00 5.00	00034 - 00034 - 00059	5.00	DCYN .00012 90627 60019	5.00	0001 2 00001 3 000053	5.00	DCYN .00026 .00058 .00058
SI (ORBITER DATA)			-5.00/	۲۵۵ - ۵۵۵ - ۵۵۵ - ۵۵۵	-5.007	00172 .00172 .00246 .00037	. = -5.00/	00146 .00146 .00286	L = -5.00/	00159 .00159 .00210	الة -5.00/	00153 .00163 .00181
147/1 ATI 03SI			NT INTERVAL	DCLM .00681 .01232	'NT INTERVAL	DCLM .00494 .01055	ENT INTERVAL	DCLM .00412 .00844 .00216	ENT INTERVAL	8,200. 60,600. 61,600.	ENT INTERVAL	DCLM .00394 .00861 .00853
- CA238		IN. XO IN. YO IN. ZO	3.30 GRADIENT	DCD 00718 02165 0724	.30 GRADIENT	000 -,00645 -,62068 -,00711	.29 GRADIENT	DCD 00411 01407 00498	3.30 GRADIENT	000 - 000330 - 000343	3.30 GRADIENT	DCD -,00186 -,00843 -,09329
SOURCE DATA		1109.0000 1 10000 1 375.0000 1	RN/L = 3.	DCL 05129 09616 05244	RN/L = 3	DCL 04775 09121 02173	RN/L = 3	DCL 03396 06420 01512	RN/L *	DCL 02266 04436	PN/L =	DCL 01786 04044 01!29
TABULATED	DATA	SAN CARACTER A REPORT OF THE PROPERTY OF THE P		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 6AADIENT		30.000 ALPHAC 2.000 4.000 GRAD:ENT		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC A.000 4.000 GRADIENT
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MAR 76	REFERENCE	2630.0000 474.8100 936.6800		20		70		20		Z G		02

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TABULATED SOURCE DATA - CA23B	
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PAGE	(4NHX30) (17 OCT	PARAMETRIC DATA	.000 STAB .000 ELEVON .000 DX		ALPHAO 10.00000 12.00000 1.00000		ALPHAO 10.00000 12.00000 1.00000	(4NHX31) (17 OCT	PARAMETRIC DATA	.000 STAB # .000 ELEVON # .000 DX		ALPHAO 8.00000 10.00000 1.00000		ALPHAO B.00000 10.00000 1.00000
	J	PARA	CC		DCBL .00014 .00036		DCBL .00010 .00049		PARA	ан и « Ст		DCBL .00058 .00053		00000. .00043 .000.
	DATA		BETA RUDDER 10RB DY	5.00	DCYN .00007 .00032	5.00	DCYN .00023 .00044	DATA)		BETA RUDDER IORB DY	5.00	DCYN .00071 .00093	5.00	DCYN . 00060 . 00012
	(ORBITER			-5.00/	0CY .00105 .00170	-5.60/	00135 .00138 .00168	I (ORBITER			-5.00/	DCY .00165 .00153 00006	-5.00/	00162 .00162 .00149 00007
	747/1 ATI 0351			INTERVAL	DCLM .00289 .00722	INTERVAL	DCLМ . 00321 . 00745	747/1 ATI 0351			ENT INTERVAL	DCLM .00042 00024 00033	IENT INTERVAL	MUDD 60100 50000
- CA23B			IN. XO IN. YO	30 GRADIENT	DCD 00246 01213	30 GRADIENT	DCD 00211 00947 00368	14-120(CA23B)		IN. X0 IN. Y0 IN. Z0	.31 GRADIENT	DCD 00606 01129	30 GRADIENT	000 00550 01055 00252
SOURCE DATA			11 09.00.0011 11 0000. 375.	RN/L = 3.	DCL 02111 05526 01708	RN/L = 3.	DCL 01937 04096 01083	ARC 14-16		0000.0011 0000. 375.0000	RN/L = 3	DCL 05396 09749 02176	RN/L = 3	DCL 04975 09256 02140
TABUI ATED 9			XXXXX YXXX RYXXX RYXX		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC 2.000 4.000 GHADIENT		17A	XMRP YMRP #		3.500 ALPHAC A.090 4.090 GRADIENT		7.500 ALPHAC 2.000 4.000 GRAD:ENT
T G V T T T T T T T T T T T T T T T T T		ATAC BURGERORY	SREF = 2690.0000 SQ.FT. LREF = 474.8100 lN. BREF = 936.6800 lN. SCALE = .0.25		, = 20		• 20		REFERENCE DATA	SAEF = 2690.0000 SQ.FT. LREF = 474.8100 IN. RREF = 936.6803 IN. SCALE = 0125		2 0		= ZG

TABULATED SOURCE DATA - CA238

23 MAR 76 TEFERENCE DATA	TABULATED SO ATA	URCE ARC	DATA - CA238 14-120(CA238)	747/1 AT1 03	O3S1 (ORBITER DATA)	(DATA)	PAR	(4NHX31) (PARAMETRIC DATA	PACE 644 17 OCT 5 1
2690.0000 SQ.FT. 474.8100 IN. 938.6800 IN.	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	0000. 0000 375.	10.00 10.00			BETA RUDDER 10RB 07	4 # # #		5.000
		# 7/NX	3.30 GRAD1	GRADIENT INTERVAL	-5.007	5.00			
•	10.000 ALPHAC 2.000 4.000 GRADIENT	DCL -, 04600 -, 08892 -, 02146	DCD -,00538 -,01004 -,00233	DCLM 00197 00143	DCY .00150 .00143	. 00052 . 00052 . 00079	DCBL .00026 .00041	ALPHAO 8.00000 10.00000	
		RN/: = 3	3.30 GRADIENT	ENT INTERVAL	-5.007	5.00			
•	15,000 ALPHAC 2,000 4,000 GRADIENT	DCL -, 04572 -, 08462 -, 01945	DCD -, 00493 -, 00946 -, 00226	DCLM 00250 00169	. 00151 . 00150 00001	00054 .00078 .00078	DCBL .00033 .00024 00005	ALPHAO 8.00000 10.00000	
		RN/! = 3	3.29 GRADIENT	ENT INTERVAL	5.007	5.00			
tt.	30.000 ALPHAC 2.000 4.000 GRADIENT	DCL 03508 06537 01514	DCD -,00335 -,00663	DCLM 00038 .00076	00.7 .00148 .00058 00048	00000 - 100000 - 100000 - 100000 - 1000000 - 1000000 - 10000000 - 10000000 - 100000000	0CBL 00013 .00044	ALPHAO 8.00000 10.00000	
		DN/L = 3	3.30 GRADIENT	ENT INTERVAL	-5.00/	5.00			
e 20	45.000 ALPHAC R.000 4.000 GRAD:EVI	00L -,02315 -,04623 -,01154	DCD 00271 00434 00082	00164 .00164 .00635	007 .00054 .00125 .00356	0000 . 0000 . 00000 .	DCBL 00019 .00005	ALPHAO 8.00000 10.00000 1.00000	
		PN/L * 3	3.30 GRADI	GRADIENT INTERVAL	-5.00/	5.00			
z 0	50.000 ALPHAC P.000 9.000 GRAD:ENT	DCL 01931 04289	DCD 00248 00386	DCLM .00220 .00255	DCY .00017 .00092	00000.	DCBL . 00032 . 00005	ALPHAO 8.00000 10.00000	

DATE 27 MAD 75			TABILATED	SOURCE DATA	- CA23B						PAGE	ይተያ ያ
<u>.</u>				בו-חו שע	11CA23B)	747/1 AT1 03S1	(ORBITER DATA)	DATA		(#EXHN#)	117 001	, 27
ď	ATAC TONGGRADA	, ,	4						PARA	PARAMETRIC DATA	⋖	
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ORIG	20	H	3.550 ALPHAC 2.000 4.000 GRADIENT	DCL 05438 10108 02335	DCD 00882 01458	DCLM .01703 .01886 .00092	DCY .00366 .00360 00003	007N .00019 .00043	DCBL .00015 .00021 .00003	ALPHAO B.00000 10.00000		
INI OC				RN/L = 3.	.30 GRADIENT	NT INTERVAL	-5.007	5.00			4	
U PAGE	20	•	7.500 ALPHAC 2.000 4.000 GRADIENT	DCL 05159 09388 02114	DCO 00815 01351	DCLM .01242 .01451 .00105	DCY .00310 .00289	DCYN 00007 .00025	DCBL .00003 .00014 .00006	ALPHAO 8.00000 10.00000		٠
EI NY				RN/L = 3	.30 GRADIENT	INT INTERVAL	-5.00/	5.00				
	20	M	10.000 ALFHAC 2.000 4.000 GRADIENT	DCL 05308 09065 01878	DCD 00780 01294 00257	DCLM .01014 .01295	DCY .00303 .00275	DCYN 00005 .00016	DCBL -,00001 .00004	ALPHAO B.00000 10.00000		
				RN/L = 3	3.30 CRADIENT	ENT INTERVAL	-5.007	5.00				
	20		15.600 ALPHAS P.000 R.000 GRADIENT	DCL 05076 08502	0CD 00726 01174	DCLM .00703 .01020	DCY .00303 .00273	DCYN 00016 .00016	DCBL 00018 .00011	ALPHAO B.00000 10.00000		
				RN/L = 3	3.29 GRADIENT	ENT INTERVAL	/00°5- ±	5.00				
	2 0	•	30.000 ALPHAC 2.000 4.000 GRADIENT	0CL 03742 06345	DCD 00490 00777	DCLM .00641 .00847	DCY .00302 .00226	DCYN 00000 00024 00012	DCBL 00046 00008	ALPHAO B.00000 10.00000	0000	

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CC I	375.0000 IN. 20	GRADIENT INTERVAL	.5.00/	RUDDER 10RB DY 5.00	W W W	.000 ELEVON .000 DX .000 MACH
45.000 ALPHAC 2.000 4.000 GRADIENT	DCL DCD 0242400 0435200 096400	259 .00639 512 .00754 076 .00058	0CY .00190 .00194 .00002	DCYN - 0000:- - 65:000:- - 65:000:-	DCBL 00072 .00004 .00038	ALPHAO 8.00000 10.00000 1.00000
50.000 ALPHAC 2.000 4.000 GHADIENT	000 000 0190700 0379900		DCY .00166 .00228 .00031	000018 000018 000013	DCBL 00071 00019	ALPHAO 8.00000 10.00000 1.00000
	ARC 14-120(CA23B)	747/1 AT1 0251	SI (ORBITER	: DATA)		<u>ک</u> :
					PARAMETR	ETRIC DATA
	0000 IN. X0 0000 IN. Y0 375,0000 IN. Z			BETA RUDDER I ORB DY	* 11 11 11	.000 STAB .000 ELEYON 8.000 DX
	RN/L = 3.34 GR	GRADIENT INTERVAL	-5.00/	5.00		
	DCL DCD 0559601008 055950237 02045	DCLM 8 .01194 7 .01589	00158 .00158 .00229	DCYN 00025 00042	DCBL .00085 .00065	ALPHAO 10.00000 12.00000 1.00000
æ	N/L = 3.34	GRADIENT INTERVAL	-5.007	5.00		
	DCL DCD 0529900939 0909602058 0189800559	DCLM 9 .01037 8 .01401 9 .00182	. 00142 . 00196 . 00096	DCYN 00026 00061 00018	DCBL .00093 .00053	AL PHAO 10.00000 12.00000 1.00000

2 647	1 75 1		5.000 .000 .000 .600										
PAGE	(4NHY10) (17 OCT	PARAMETRIC DATA	.000 STAB ** .000 ELEVON ** .000 DX **		ALPHAO 10.00000 12.00000 1.00000		AL PHAO 10.00000 12.00000 1.00000		AL PHAO 10 . 00000 12 . 00000 1 . 00000		AL PHAO 10.00000 12.00000 1.00000		AL PHAO
	_	PARAM			DCBL .00109 .00051		DCBL .00082 .00025		DCBL .00065 .00030 00018		DCBL .00061 00011		DCBL
	DATA		BETA RUDDER 10RB DY	5.00	DCYN 00020 00073	5.00	DCYN 00036 00084 0009	5.00	DCYN 00053 00097 00097	5.00	DCYN 00049 00085 00018	5.00	DCYN
	SI (ORBITER DATA)			-5.00/	00143 .00189 .00023	-5.00/	DCY .00073 .00128	-5.00/	0007 .00089 .00065 	-5.007	.00171 .00160 .00160	5.00/	DC
	747/1 AT1 0251			GRADIENT INTERVAL	DCLM .00924 .01266	GRADIENT INTERVAL	.00788 .01097 .01555	GRADIENT INTERVAL	DCLM .00585 .00912	INT INTERVAL	00471 .00471 .005607	GRADIENT INTERVAL	1
TA - CA23B	14-1201CA23B) 74		N. XO N. XO N. XO	.33 GRADIE	000 00875 01869	35	000 00790 01698 00454	.35 GRADIE	DCD 00437 01076 00320	.35 GRADIENT	DCD 00196 00557	3.35 GRAD16	C
SOURCE DATA	ARC 14-12		1 0000.0011 1 0000. 375.	RN/L = 3.	DCL 05042 08651 01805	RN/L = 3.	DCL 04964 08292	RN/L = 3.	DCL 03469 06209 01370	RN/L . 3.	DCL 02027 04376 01174	RN/L = 3	į
TABULATED		ATA	XMRP = ZMRP		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GAADIENT		30.000 ALFHAC 2.000 7.000 GRADIENT		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000
		NCE D	SO.FT.		•		•		•		H		H
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DATE 23 MAR 76	TABULATED	SOURCE DATA	TA - CA23B					α .	PAGE 648
		ARC 14-	14-120(CA23B)	747/1 ATI 0	O251 (ORBITER	R DATA)		(4NHY13) (17	(57 730
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SREF = 2590.0000 SQ.FT. LREF = 474.8100 [N. BREF = 936.6800 IN. SCALE = .0125	X X MRP X MRP Z MPP	1109.0000 .0000 375.0000	N. XO N. XO 20 X			BETA RUDDER IORB DY	* * * *	STA ELE DX MAC	.v. v. 000. 0000.
		RN/L =	3.34 GRAD!	GRADIENT INTERVAL	L = -5.00/	5.00			
• 20	3.500 ALPHAC 2.000 4.000 GRADIENT	DCL 05878 10819 02471	DCD 00890 01668	DCLM .01274 .0161+	.00123 .00023 00050	DCYN .00019 .00001	DCBL .00102 .00118	AL PHAO B. 00000 10. 00000 1. 00000	
		RN/L =	3.34 GRADII	GRADIENT INTERVAL	5.00/	5.00			
2 20	7.500 ALPHAC A.000 4.000 GAADIENI	0CL 05758 10112 02177	0CD 00850 01532 00341	DCLM .01019 .01325	DCY .00035 00010	DCYN .00013 .00000 00007	DCBL .00087 .00115	AL PHAO B. 00000 10.00000	
		RN/L = 3	3.33 GRADIENT	ENT INTERVAL	. = -5.00/	5.00			
= ZQ	10.103 ALPHAC 2.000 4.000 GRADIENT	DCL 05623 09876 02126	DCD 00836 01485 00325	0018 .00962 .01252	DCY 00026 .00000.	90000 · -	DCBL .00074 .00100	AL PHAO B. 00000 10.00000 1.00000	
		RN/L = 3	35 GRADIENT	INT INTERVAL	= -5.00/	5.00			
• 20	15.000 ALFHAC A.600 4.000 GPADIENT	5CL -,05394 -,09436 -,02021	DCD 00707 01332	00806 00806 00906 00906 00906	DCY -,00054 -,00019	DCYN 00002 00011	DCBL. .00070 .00095	AL PHAO B. 00000 10.00000 1.00000	
		RN/L = 3	.35 GRADIENT	INT INTERVAL	-5.00/	5.00			
. 20	30.000 ALPHAC 2.000 4.000 GRADIENT	DCL 04032 07330 01649	DCD 00497 00927	DCLM .00577 .00893	000 - 00052 - 00076 - 00064	DCYN 00019 00006	DCBL .00039 .00068	ALPHAO B.00000 10.00000 1.00000	

DATE 23 MAR 76	TABULATED	SOURCE DATA	- CA23B					PAGE	
		ARC 14-12	-120(CA238) 7	747/1 ATI 0251	SI (ORBITER DATA)	DATA)		(4NHY13) (17 OCT	1 27 T
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		RN/L = 3.	.35 GRAD16	GRADIENT INTERVAL	-5.00/	5.00			
2 0	45.000 ALPHAC 2.000 4.000 GRADIENT	DCL 02973 05703	DCD 00368 00620	DCLM .00599 .00732	5000% -,0000% -,00039 -,00039	DCYN 00003 00018 00008	CCBL .00040 .00056	ALPHAD B.00000 10.00000 I.00000	
		RN/L = 3	.35 GRADIENT	ENT INTERVAL	+ -5.007	5.00			
• 20	50.000 ALPHAC 2.000 4.000 GRADIENT	DCL 02705 05018 01157	DCD 00277 00484 000104	DCLM .00541 .00667 .00063	.00010 .00058 .00058	DCYN .00003 00016	DCBL .00057 .00069	AL PHAO B : 00000 10 : 00000 1 : 00000	
		ARC 14-1	14-120(CA23B)	747/1 ATI 02	O2SI (ORBITER	DATA		(4NHY18) (17 0	OCT 75)
REFERENCE DATA	DATA						PARA	PARAMETRIC DATA	
SREF = 2690.0000 SO.FT. LREF = 474.8100 IN. RREF = 935.6800 IN. SCALE = .0125	XMRP YMRP ::	1109.0000 .0000 375.0000	IN. X0 IN. Y0 IN. Z0			BETA RUDDER 10KB DY	### 0	.000 STAB	5.000 5.000 .000 .600
		PN/L = 3	.34 GRADIENT	ENT INTERVAL	-5.00/	5.00			
z Z O	3.500 ALPHAC 2.000 4.000 GRADIENT	DCL 05330 10297 02484	0CD 00980 01675 00348	01241 .01241 .01570	DCY .00152 00074 00113	DCYN 00116 00165	DCBL 00180 00430 00125	AL PHAO 8.00000 10.00000	
		RN/L = 3	3.34 GRADIENT	ENT INTERVAL	-5.00/	5.00			
¥ ZG	7.500 ALPHAC 2.000 4.000 GRADIENT	DCL 04861 09333 02236	000 00818 01465 0324	DCLM .01018 .01303	DCY 00016 00109 00047	DCYN 00102 00135 00017	0CBL 00144 00307 00081	AL PHAO B.00000 10.00000 1.00000	

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PARAN			DCBL 00148 00259 00051		5CBL 00140 00195		DCBL 00071 00097 00013		DCBL 00037 00055		DCBL 00016 00042 00013
	BETA RUDD IORB DY	5.00	DCYN 00080 00136	5.00	DCYN 00067 00105	5.00	DCYN -,00034 -,00068	5.00	DCYN 00017 00031 00017	5.00	00010 000010 00055
		-5.00/	, 00028 , 00111 , 00059	-5.007	.00011 00011 000:07	-5.00/		-5.007	50000. 440000.	-5.00/	55000. - 00084 - 00055
		NT INTERVAL	00931 .00931 .01216 .01216	NT INTERVAL	DCLM .00829 .01098	NT INTERVAL	DCLM .00605 .00801 .00098	NT INTERVAL	DCLM .00522 .00657 .00657	NT INTERVAL	DCLM .00470 .00603
	N		DCD 00780 01360 00290		DCD -,00709 -,01209 -,00250	.35 GRADIE	DCD 00470 00781	.35 GRADIE	DCD -, 03264 -, 000456 -, 00096	.35 GRADIE	DCD 00239 00387 00074
	0000. 0000. 375.	RN/L = 3	DCL 04836 08934 02049	RN/L = 3	DCL 04619 08357 01869	RN/L = 3	DCL 03742 06673 01465	FN/L = 3	DCL 02352 04797 01252	PN/L = 3	DCL 02311 0420 01055
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PAGE 651	(17 OCT 75)	<	STAB 5.000 ELEVON 5.000 DX 000 MACH 600		'								0000
	(617HN+)	PARAMETRIC DATA	.000 STAB .000 ELEV B.000 DX 10.000 MACH		ALPHAO 10.00000 12.00000 1.00000		ALPHAO 10.00000 12.00000 1.00000		ALPHAO 10.00000 12.00000 1.00000		ALPHAO 10.00000 12.00000 1.00000		ALPHAO 10.00000 12.00000 1.00000
		PAR	B B B B		DCBL 00235 00558 00162		DCBL - 00176 - 00431 - 00127		DCBL 00147 00343 0098		OCBL 00070 00233		DCBL 7.00011 7.00013
	R DATA)		BETA RUDDA 10RB 0 Y	5.00	DCYN 00173 00141	5.00	DCYN .00138 - 00136 .00001	5.00	DCYN 00116 00135 00010	5.00	DCYN 00084 00118	00.5 /	DCYN 00250 - 00:10 00625
	O2S1 (ORBITER			L = -5.00/	DCY .00060 00223	L = -5.00/	.00063 .00161 00151	15.00/	DCY .00062 00110 00086	1L = -5.00,	DCY 00006 00070	AL = -5.00/	DCY .00039 00095
	747/1 AT1 0			ENT INTERVAL	DCLM .01293 .01747	ENT INTERVAL	01136 .01524 .01524	ENT INTERVAL	DCLM .01028 .01367	ENT INTERVAL	MUDD. 0.00849 0.1100.	IENT INTERVA	DCLM .00649 .00891
A - CA238	-120(CA23B)		1N. X0	3.34 GRADIENT	000 01392 02199	3.34 GRADIENT	000 01090 02074 00492	3.33 GRADIENT	DCD 00680 02014	3.35 GRADIENT	200 -,00757 -,01761	3.35 GRADIENT	9CD 3047 3 31654 +9999
SOURCE DATA	ARC 14-1		1109.0000 .0000 375.0000	RN/L =	DCL 05218 09010	RN/L =	000 -,04894 -,08593 -,01905	RN/L =	DCL -,04493 -,08455 -,01981	RN/L *	DCL -,04849 -,08195	RN/L =	DCL 03771 05356 01143
TABULATED		ATA	XMRP YNRP ZMRP		3.500 ALPHAC 2.000 4.000 GRADIENT		7.500 ALPHAC 2.000 4.000 GHADIENT		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GRADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT
		NCE D	SO.FT.								•		н
MAR 76		REFERENCE DATA	2690.0000 S 474.8100 1 936.6800 1		Z Q		20		20		20		20
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ARC 14-120(CA238) 747/1 AT1 0251 (ORBITER DATA) (4NHY19) (17 0CT 75)	PARAMETRIC DATA	.0000 50.FT. XMRP = 1109.0000 IN. XO .8100 IN. YMRP = .0000 IN. YO .6800 IN. ZMRP = 375.0000 IN. ZO .0125 DY = 10.000	RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00	- () 1	RN/L = 3.35 GRADIENT INTERVAL * -5.00/ 5.00	$\alpha \cdots$	ARC 14-120(CA23B) 747/1 ATI 0351 (OPBITER DATA)	REFERENCE DATA PARAMETRIC DATA	SQ.FT. XMRP * 1109.0000 IN. XO IN. YMRP = .0000 IN. YO IN. ZMRP = 375.0000 IN. ZO DY * .000	RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00	DZ = 3.500 ALPHAC DCL DCD DCLM DCY DCYN DCBL ALPHAO 2.0000444500702 .01474 .00343 .00125 .00027 10.00000 4.0000911902099 .02245 .0023600009 .00053 12.00000 GRADIEMI0233700699 .003850005300067 .00013 1.00000	RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00	
								REFERENCE (SREF = 2690,0000 SQ.FT. LREF = 474.8:00 IN. RREF = 936.6800 IN. SCALE = .0:25				

ALPHAO 10.00000 12.00000

PAGE 653	0CT 75)												
	(4NHY27) (17	PARAMETRIC DATA	STA ELE DX MACI		ALPHAO 10.00000 12.00000		ALPHAO 10.00000 12.00000		ALPHAO 10.00000 12.00000 1.00000		ALPHAO 10.00000 12.00000 1.00000		ALPHAO 10.00000 12.00000 1.00000
		PAR	# # # # 65		DCBL .00073 .00025		DCBL .00027 .00018		DCBL .00024 .00012		DCBL 00018 .00037		DCBL - C0014 - 00053 - 00053
	P DATA)		BETA RUDDE 10RB DY	5.00	DCYN .00062 .00003	5.00	DCYN .0000. .00041	5.00	DCYN - 00006 - 00026	5.00	00007 .00007 .000021	5.00	DCYN .00007 .00033
	0351 (ORBITER			. = -5.00/	DCY .00132 .0000.0505	. = -5.00/	DCY .00228 .00446 .00109	. = -5.007	DCY .00199 .00363	-5.00/	DCY .00215 .00256 .00020	-5.00/	0CY .00232 .00224 00004
	747/1 AT1 03			GRADIENT INTERVAL	DCLM .01029 .01571	ENT INTERVAL	DCLM .00928 .01445	ENT INTERVAL	DCLM .00604 .01151	ENT INTERVAL	DCLM .0059; .0105°	ENT INTERVAL	DCLM .00495 .01026
1A - CA23B	-120 (CA23B)		IN. X0 IN. Y0 IN. Z0	3.30 GRAD1	DCD 00691 02098 00558	3.30 GRADIENT	000 -, 00745 -, 01888	3.29 GRADIENT	DCD -, 00454 -, 01361	3.30 GRADIEN	000 00261 00972	1.30 GRADIENT	DCD 0CE37 00643 00303
) SOURCE DATA	ARC 14-		1109.0000 .0000 375.0000	RN/L = 3	DCL 04651 08733 02041	RN/L = 3	DCL 04708 08157 01725	RN/L = 3	DCL 03604 06040 01218	RN/L * 3	DCL 02089 04165 01038	RN/L = 3	DCL 01952 03641 03641
TABULATED		DATA	XMRP YMRP ZMRP		10.000 ALPHAC 2.000 4.000 CRADIENT		15.000 ALPHAC 2.000 4.000 GRADIENT		30.000 ALPHAC 2.000 4.000 GRADIENT		45.000 ALPHAC 2.000 4.000 GRADIENT		50.000 ALPHAC 2.000 4.000 GRAD:ENT
MAR 76		REFERENCE DATA	2690.0000 SO.FT. 474.8100 IN. 936.6800 IN.		. 20		• Za		* 20		. 20		. 20
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(4NHY32)

ARC 14-120(CA23B) 747/1 ATI 0351 (ORBITER CATA)

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17 001										
(4NHX33)	RIC DATA	O STAB O ELEVON O DX O MACH		ALPHAO 10.00000 12.00000 1.00000		ALPHA0 10.00000 12.00000 1.00000		AL PHAD 10.00000 12.00000 1.00000		ALPHAO 10.00000 12.00000 1.00000
3	PARAMETR1C	.000 .003 .8.000 10.000								
	A A	BETA - RUDDER - 10RB - DY - 1		00154 00368 00107		DCBL 00134 00302 00084		DCBL 00052 00093		DCBL 00034 00049 00007
DATA)		RUD RUD 10R	5.00	DCYN -,00063 -,00133 -,00035	5.00	DCYN -, 00054 -, 00132 -, 00039	5.00	5CYN 00023 00104	5.00	CCYN 00042 00067
SI (ORBITER			-5.00/	,00039 -,00006 -,00006	-5.00/	720 .00084 .0000	-5.00/	00121 .00116 .00116	-5.00/	00109 00109 00134
147/1 ATI 03SI (ORBITER DATA)			GRADIENT INTERVAL	DCLM . 01050 . 01740 . 00345	GRADIENT INTERVAL	DCLM .00908 .01559	GRADIENT INTERVAL	DCLM .00787 .01324	GRADIENT INTERVAL	DCLM .00594 .1510.
ARC 14-120(CA23B) 7		20 0 2 40 20 4 X	3.30 GRAD 1E	000 00793 02231	3.30 GRADIE	DCD 00742 02067 00662	3.29 GRAD !!	DCD -,00457 -,01370 -,00456	3.30 GRAD!	0C0 00240 01026 01036
ARC 14-1		0000.0011 0000 375.0000	RN/L = 3	DCL 04674 08918 02122	RN/L = 3	DCL 04757 08444 01844	RN/L = 3	DCL 03432 05625	RN/L .	DCL 01984 04163 01090
	ATA	XMRP YMRP == ZMRP		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GHADIENT		30.009 ALPHAC 2.000 4.000 GRADIENT		45.000 ALPHAC 2.000 4.000 GRADIENT
	NCE D	50.FT.		•		•		•		•
	REFERENCE DATA	2690.0000 S 474.8100 1 936.6800 1		02		Z Q		20		20
		SREF LREF BREF SCALE								

ALPHAO 10.00000 12.00000 1.00000

DCBL -.00030 -.00026

DCYN -. 00024 . 00006

00135 .00135 .00137

DCLM .00651 .01158 .00254

DCD -, 00253 -, 00975 -, 00361

DCL -.01861 -.03856 -.00938

50.000 ALPHAC 2.000 4.000 GRADIENT

20

5.00

- -5.00/

RN/L = 3.30 GRADIENT INTERVAL

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PAGE	

. 657	1 75 1		0000 0000 0000 0000 0000 0000 0000 0000 0000										,		
PAGE	(4NHY34) (17 OC)	PARAMETRIC DATA	.000 STAB .000 ELEV GN .000 DX		AL PHAO B. 00000 10. 00000 1. 00000		AL PHAO 8.00000 10.00000 1.00000		ALPHAO 8.00000 10.000000 1.00000		ALPHAO 8.00000 10.00000		ALPHAO 8.00000 10.00000 1.00000		
		PARA	φ 		DCBL .00015 .00020		DCBL .00002 .00013		DCBL 00002 .00002		DCBL 00018 .00009		DCBL 00047 00009		
	DATA)	REFERENCE DATA			BETA RUDDER 10RB DY	5.00	DCYN .00019 .00043	5.00	DCYN 00007 .00024	5.00	DCYN 00004 .00015	5.00	DCYN 00015 .00015	5.00	DCYN 00000 00025 00012
	SI (ORBITER			-5.00/	.00363 .00360 .00360	-5.007	00309 .00309 .00288	. = -5.007	DCY .00301 .00273 00014	. = -5.00/	00301 .00301 .00271	/00.5- + 1	007 .00301 .006,25 00038		
	747/1 AT! 035!				GRADIENT INTERVAL	DCLM .01688 .01886	NT INTERVAL	001836 .01450 .00107	INT INTERVAL	01009 .01297 .01297	INT INTERVAL	DCLM .00720 .010?5	ENT INTERVAL	DCLM .00539 .00950	
SOURCE DATA - CA23B	14-120(CA23B) 7					IN. XO IN. XO IN. XO	31	0CD 00879 01458	.30 GRADIENT	000 30814 01351 00268	.30 GRADIENT	DCD 00779 01294 00257	.30 GRADIENT	000 00725 01175 0328	.29 GRADIENT
	ARC 14-12		XMRP = 1109.0000 YMRP +	RN/L = 3.	DCL -,05437 -,10107 -,02335	RN/L = 3.	DCL 05156 09385 02114	RN/L . 3	DCL 05304 09063 01879	RN/L = 3	DCL -,05072 -,08597 -,01762	RN/L = 3	DCL 03742 06343 01301		
TABULATED					3,500 ALPHAC 2,000 4,000 GRADIENT		7,500 ALPHAC 2,000 4,000 GRADIENT		10.000 ALPHAC 2.000 4.000 GRADIENT		15.000 ALPHAC 2.000 4.000 GRADIENT	•	30.000 ALPHAC 2.000 4.000 GRADIENI		
					•	•		•		•					
MAR 75			2690.0000 SG 474.8100 IN 936.6800 IN		Z 0		20		Z 0		ZO		Z Q		
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SREF LREF BREF SCALE

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